

MANUFACTURERS' RECORD

A Weekly

Southern Industrial and Hardware

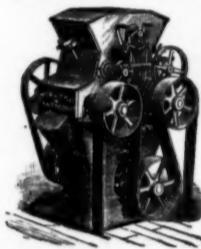
Newspaper.

VOL. 9. NO. 2. WEEKLY.

BALTIMORE. FEBRUARY 20, 1886.

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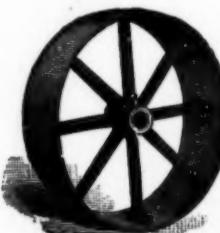


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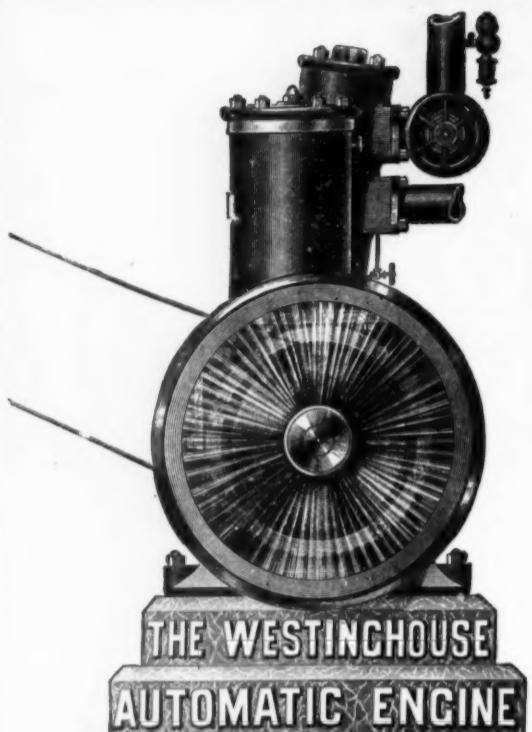
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OUR BELTING is made of Leather, tanned on the surfaces only; the interior (which is the fibre and strength of the hide) is not tanned, but Rawhide fulled and softened by our patent process. Our belting is more pliable, and hugs the pulley better and transmits more power than any other belt. It does not pull out at the lacholes or rivets. It stretches less than any other belt. It works equally well for the largest Driving Belts or for the fastest running machinery and smallest pulleys. OUR LACE LEATHER is made of Rawhide, by our patent process, without any tanning and is stronger and will wear better than any other. WE ALSO MAKE THE BEST PICKER LEATHER AND BELT GREASE IN THE COUNTRY. Satisfaction guaranteed.

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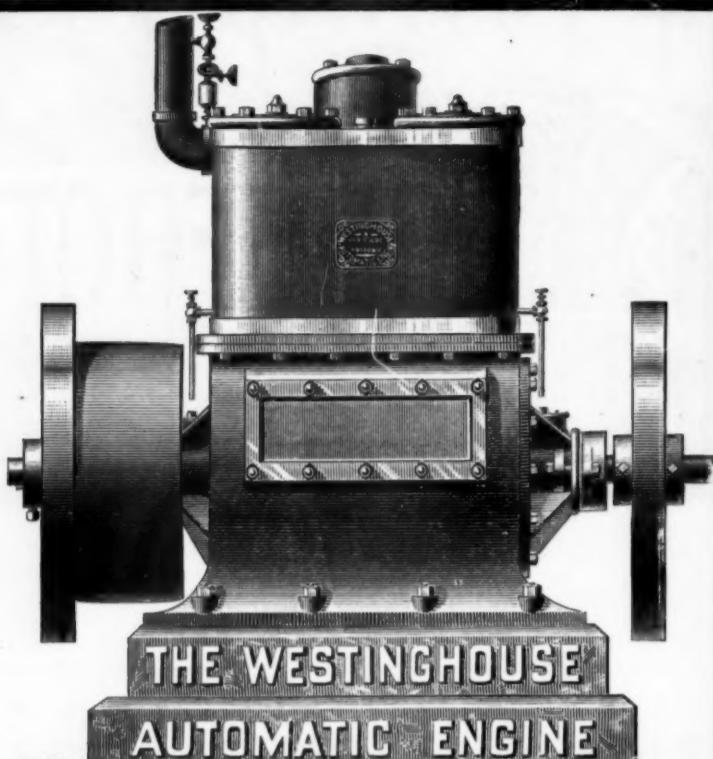
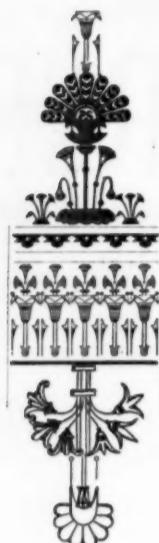
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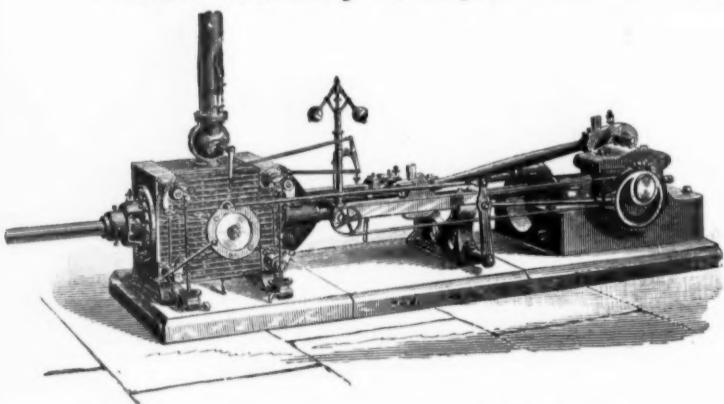
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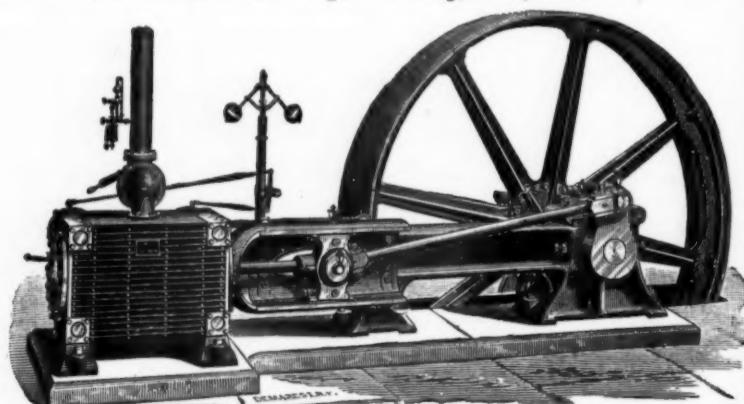
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WE REGARD THE REYNOLDS-CORLISS ENGINE, BUILT BY E. P. ALLIS & CO., MILWAUKEE,

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DRAWING FRAMES, ANY LENGTH, WITH 3, 4 AND 5 LINES OF STEEL ROLLERS.
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RING SPINNING FRAMES, 2, 1½, 1½ AND 1½ INCH RINGS.

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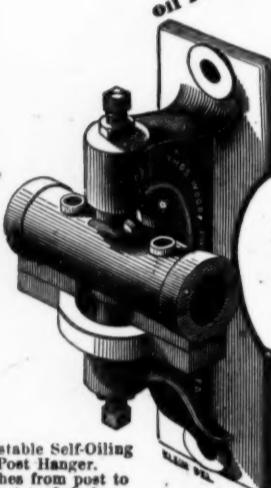
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Office, 2106 Wood St., Philadelphia.
THOMAS WOOD,
Manufacture as Specialties
Power Looms, Patent Bobbin or Quill
Winding Machines, Plain and Presser
or Spooling Machines, Plain and Presser
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Scouring, Fulling and Dyeing,
Carding, Filling and Dyeing,
Warping Mills,
16, 18 and 20 yards Circumference,
WITH IMPROVED HECKS.

WARPING MILLS,
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PULLEY IN TWO PARTS

With Patent
ADJUSTABLE SELF-OILING HANGERS,
Also WALL, POST AND GIRDER HANGERS.
Pulleys, from 4 inches to 10 feet in diameter.
Pulleys in two parts, any size required.
PATENT FRICTION PULLEY.
PATENT HOISTING MACHINES.
Oil Presses for Lard, Fish and Paraffine.

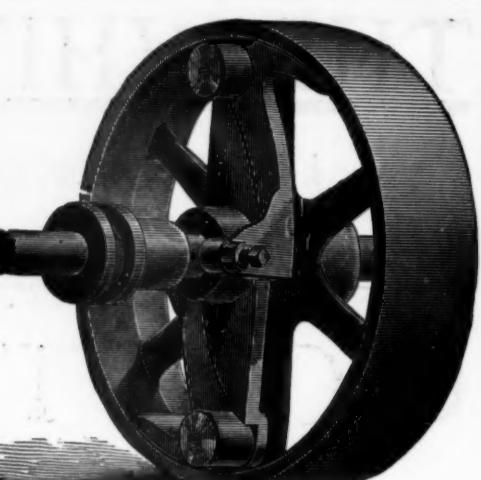
Ball and Socket
Self-Oiling Pillow Block.

DOUBLE-BRACED ADJUSTABLE SELF OILING HANGER.

Adjustable Self-Oiling Post Hanger.
6 inches from post to center of shaft.

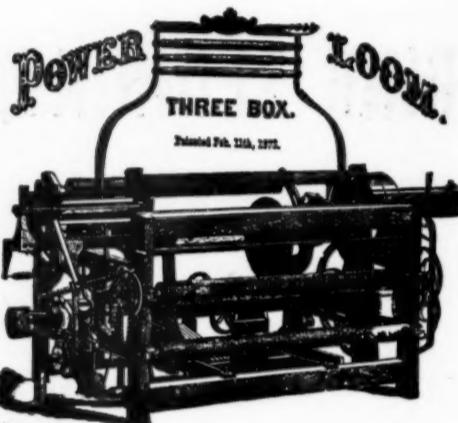
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Simple, reliable and very durable.
Suitable for any kind of driving, they serve equally well as driver or driven.

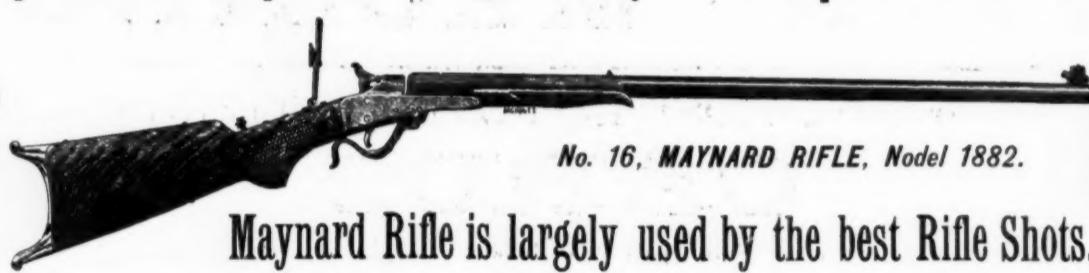


THE ◆ MAYNARD ◆ RIFLE

In all Calibres from 22 to 50.

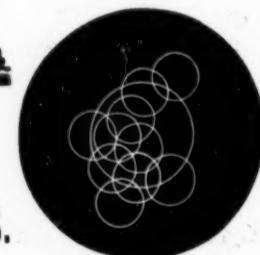
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Our Stock takes Rifle
Barrels of different
Calibres, and a
Shot Barrel.

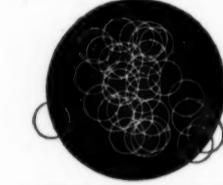


No. 16, MAYNARD RIFLE, Model 1882.

Maynard Rifle is largely used by the best Rifle Shots.



TEN CONSECUTIVE SHOTS,
100 yards, with a MAYNARD RIFLE, .22 inch, .32 calibre, 35 grains of powder, with a patched bullet of 165 grains.



THIRTY CONSECUTIVE SHOTS,
75 ft. off-hand, with a MAYNARD RIFLE, .22 calibre. By H. G. BIXBY, Nashua, N. H.

At the Spring Meeting of the Lawrence (Mass.) Rifle Club, May 30, 1885, Mr. E. F. RICHARDSON, with a Maynard Rifle, made 27 consecutive bull's eyes, at a distance of 200 yards, off-hand, on a paper target. On July 11, 1885, he scored 31 consecutive bull's eyes under the same conditions. These scores are the best on record.

On May 9, 1885, Mr. W. H. TAFT, of Brattleboro, Vt., made in a regular match, with a Maynard Rifle, at 200 yards distance, off-hand, 117 out of a possible 120, on the Massachusetts Paper Target, a score which has never been excelled.

Inside of a ring 3 1/4 inch diameter, Mr. C. H. BROWN, of Fitchburg, Mass., in a regular match at Walnut Hill Range, July 5th, 1884, at a distance of 200 yards, with a Maynard Rifle, placed 7 consecutive shots.

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C. E. RILEY.

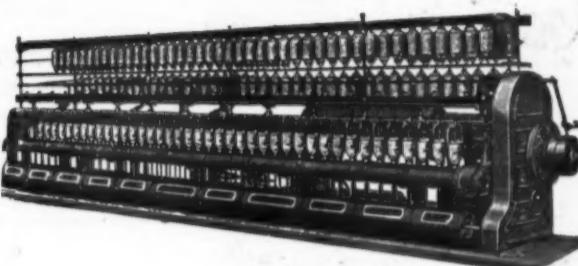
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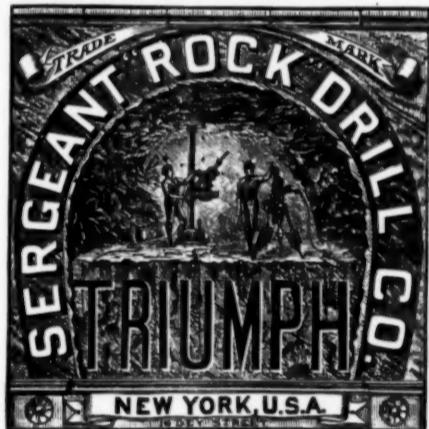
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GOLD MEDAL AWARDED NEW ORLEANS, 1885, FOR BEST RUNNING BELTS.

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For Main Driving it is the Best. Much Cheaper Than Leather.

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THE GANDY BELTING CO., BALTIMORE, MD.**THE "TRIUMPH" ROCK DRILL**
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Are the Latest and Most Improved Machines that were ever designed for the work required of them. They are the Most Simple, Economical and Effective now known, and will satisfy all Purchasers.

Boilers, Steam Pumps, Hoisting Engines, Pipe and Fittings, Electric
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Complete Specifications for Rock Drilling and Mining Plants Furnished on Application.

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EVERY RING WARRANTED.

The Simplest and Best Method of Adjusting Rings.

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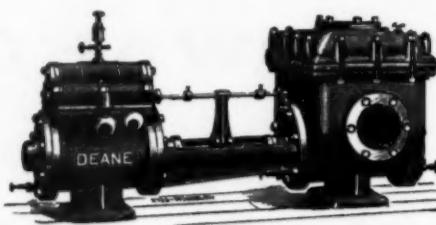
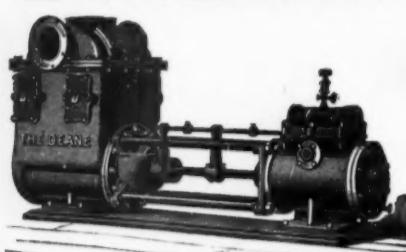
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Gas and Kerosene Burners and Trimmings. — The Celebrated Leader Burner a Specialty.

ELECTRIC COPPER WIRES, Plain and Covered. Particular Attention given to Cutting Blanks and Metals to Order.

THE DEANE STEAM PUMP CO., HOLYOKE, MASS.

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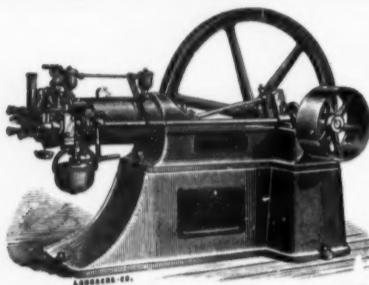
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VACUUM PUMPS FOR SUGAR WORK, ETC.

IRRIGATION PUMPS ARE SPECIALTIES.

Water Works Pumping Engines for Cities and Towns.

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Over 14,000 in Use.

Otto Gas Engine

20 to 70 per cent less Gas consumption than ANY other ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

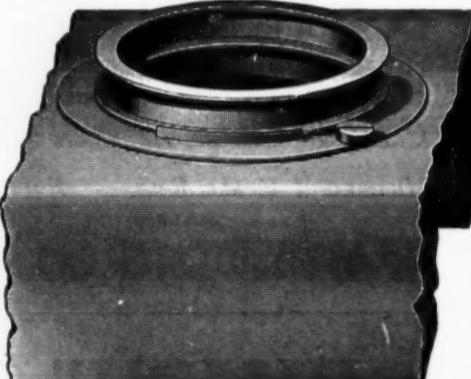
No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies. UNSURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. Sizes: 1 to 25-horse power.

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DOUBLE ADJUSTABLE Spinning Rings.

GEORGE DRAPER & SONS,
HOPEDALE, MASS.

TELEGRAPH ADDRESS AND RAILROAD STATION,
MILFORD MASS.



	Number of Rings	Number of Rings sold for repairs.
1869...	6,095,.....	
1870...	20,255,.....	
1871...	38,048,.....	
1872...	94,264,.....	12
1873...	117,301,.....	
1874...	168,382,.....	500
1875...	223,024,.....	963
1876...	185,319,.....	947
1877...	270,811,.....	946
1878...	215,214,.....	3,399
1879...	336,018,.....	8,007
1880...	367,560,.....	11,264
1881...	559,730,.....	8,974
1882...	636,715,.....	22,515
1883...	416,500,.....	21,689
1884...	310,169,.....	25,105
1885, 9 mos.	312,056,.....	22,373
Total number sold...	4,489,794	126,604
Total number in use...	3,383,190	

The great durability of our Rings is shown by the fact that we have more rings in use over twelve years old than all we have sold for repairs.

This statement shows unmistakably that a mill once supplied with our rings need think but little of the cost of repairs. As the number sold for repairs is an average of about twenty per cent. of the number sold the tenth year before, the average life of our rings will be at least twelve years.

Do not make the mistake of ordering new frames without specifying Double and Adjustable Rings. While they cost more to begin with, they are much the cheapest in the end, on account of their uniform excellent quality and unparalleled durability.

As an encouragement to use none but the best of Rings, we reduced the price on and after the first day of January, 1885, of those 1 1/2 inches or less in diameter, without holders and screws, to be used only to take the place of our rings worn out, to 12 cents each.

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LOCOMOTIVES FOR ALL KINDS OF SERVICE

BLAST ENGINES FOR IRON & STEEL WORKS

BESSEMER STEEL PLANT MACHINERY.

DERRICK & WRECKING CARS.

SPRING PLATE STEEL TIRED CAR WHEELS. CAST CAR WHEELS, MINE CAR WHEELS.

STATIONARY ENGINES, HORIZONTAL & VERTICAL. SINGLE & IN PAIRS.

HIGH PRESSURE, CONDENSING & COMPOUND. HOISTING ENGINES.

CARRIAGES, DRUMS & MACHINERY.

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COAL & PHOSPHATE BREAKERS WITH PATENT REMOVABLE STEEL TEETH.

SCREENS & VENTILATING FANS.

PUMPING ENGINES OF HIGH DUTY TYPES.

CORNISH PUMPING ENGINES. PUMPS, VALVES.

BOILERS OF EVERY KIND & SIZE.

HANCIERS, SHAFTING & PULLEYS.

GEARS BOTH CAST & CUT.

HEAVY MACHINERY OF ALL KINDS

GENERAL OFFICE SCRANTON, PA.

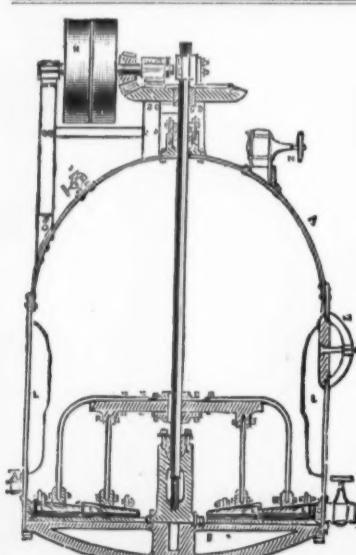
NEW YORK OFFICE 112 LIBERTY ST.

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SCRANTON AND WILKES-BARRE, PA.

SOLE AMERICAN BUILDERS OF THE STOCKPORT GAS ENGINE, AND THE LIGHTFOOT DRY AIR REFRIGERATING ENGINE.

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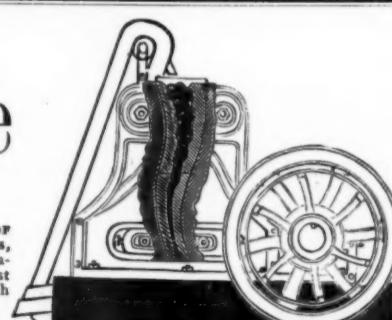


THE MEECH GOLD AND SILVER ORE Disintegrating Machine

The Only Method for Preparing the Ore for Amalgamation.

Disintegrating, Decomposing and Desulphurizing the ore under a HIGH TEMPERATURE AND PRESSURE OF STEAM HEAT, with chemical action and attrition, dissolves and breaks up the chemical combination in the ores, individualizing, cleaning and separating the atoms of metal from the gangue, perfectly freeing them for amalgamation in combination with the MEECH AMALGAMATION MACHINE and process, (being the greatest combination of Amalgamation known,) will successfully extract 90 per cent. of the metal from rebellious ores, such as Sulphurites, Sulphates, Sulphides, Chlorides, Bromides, Oxides, Tellurides, &c.

We desire business correspondents in every mining district in the United States.



THE MEECH CRUSHER & PULVERIZER.

This Machine will CRUSH AND PULVERIZE GOLD AND SILVER ORES to 20, 40, and 60 mesh fine, and from 20, 40 and 60 tons per day. The principles of this machine, making it superior to all others, are the peculiar concave and convex shape of the jaws, with concave and convex projections, which breaks, crushes, stamps and pulverizes the ore with less power, wear and tear, than any other machine. MANUFACTURED BY

MEECH & CO., Cleveland, Ohio.

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BALTIMORE Manufacturers' Record.

Published Every Saturday by the

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Secretary and General Manager.

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Extra for outside pages and opposite first page of reading matter.

BALTIMORE, FEBRUARY 20, 1886.

The Prosperity of Florida.

The people of Florida are very justly indignant at the many falsehoods that have been circulated about the damage to that State by the late cold spell. It is true that heavy ice formed in nearly all parts of the State, and that oranges on the trees and tender vegetables were, to a large extent, frozen. This no one denies, but that the orange trees were killed or that the orange industry received any very serious set back, is almost universally denied by those who are in a position to know, and whose testimony is worth anything. The very fact that the State passed through such a trying ordeal—the severest weather, it is believed, since 1835—without far greater losses than were suffered, will, we are confident, do far more good for the State than the amount of harm done by the freeze. Heretofore there has been some uncertainty as to the orange business, and as to whether the trees could successfully resist a protracted cold spell, should it come. Such very severe weather hardly strikes that State probably more than once or twice in a century, and until the recent spell there had been no such intense cold felt in Florida since the orange and vegetable business commenced to attract so much attention. It has now been demonstrated that the orange tree can live even through such intense cold, and this fact alone will, in the eyes of many people, add greatly to the attractions of an orange grove as a permanently safe investment, notwithstanding an occasional touch of a Northern blizzard. This is one very decided gain for Florida. Moreover the freeze proved destruc-

tive to many insects, against which the orange grower has to constantly fight, and this too is a great advantage. Another good result will be that it will teach the people of Florida not to permit orange culture to claim their whole attention to the exclusion of all other forms of agriculture. In agriculture, as in any other industry, there must be diversity to ensure permanent prosperity. And for the good of Florida it will be well if her people have been taught, by the partial loss of one orange crop, not to devote their whole time and attention to oranges, but to diversify their productions, to be more self-supporting than heretofore, and to make the orange crop a surplus money crop. If this has been even partly accomplished by the late cold weather then the temporary loss will prove a permanent gain to the State. The all-cotton system, with its attendant evils, is the curse of Southern agricultural interests, and yet, under a proper system of cultivation, cotton can be made a very profitable crop. And so it is with all other agricultural products. An exclusive crop, whether it be cotton, corn, wheat, tobacco or oranges, will not prove permanently profitable, however flattering the returns may be for a while. In Florida all interest was being too largely centered in oranges, and this freeze will doubtless convince even orange growers of the advisability of raising as far as possible their own home supplies.

The calumnies of those who from malevolence or ignorance are seeking to discredit the attractions and capabilities of the State are controverted by the testimony of thousands who have regained health, and made money cultivating "Florida sand." Of course every invalid who goes to Florida will not be restored to health or be forever exempt from sickness, nor will everybody who goes there for business purposes amass wealth. There are many places that are unhealthy in Florida as in every other State. Because, for example, there are malarious districts in Maryland is not sufficient reason for denouncing the whole State as unhealthful. Because some adventurers have taken advantage of the large immigration to Florida and the interest centering on the State as a place for investment, to float dishonest land schemes, is no reason why every real-estate dealer or every man who advertises Florida property for sale should be considered a thief. Nobody ought to be foolish enough to buy land in Florida, or anywhere else, without knowing something about it, or about the man or company from whom or through whom he buys it.

The prosperity of Florida is built on a sure foundation. The State possesses attractions and resources and capabilities that do not exist elsewhere, and which are such as are in the nature of things bound to bring her population and wealth.

Making Railroad Cars in the South.

Very few recent events in the industrial world have been more widely discussed than the order received by the Roanoke Machine Works, of Roanoke, Va., from the New York, New Haven & Hartford Railroad for 500 cars. That a Southern concern, and that, too, in a new place like Roanoke, should be able to underbid all of its Northern competitors and secure an important order from a Northern railroad, opened the eyes of many to the possibilities of the South. Many efforts have been made to argue away the force of this order and to show that it was an exceptional case. The Railway Review, of Chicago, especially, attempted to do this. It stated:

"The bodies of these cars will, of course, be built in Virginia; the iron required in their construction is being sought for in Pennsylvania, and the wheels are to come from Lime Rock, Ct."

And then claimed it to be

"A question with many if there will not be money lost on this contract."

In a subsequent issue the Review said:

"There is a little doubt that the car-building contract placed in Virginia, which we mentioned last week, is a losing one to the builders. But the explanation is probably to be found in the fact that the manufacturing firm which took the order at losing figures did so simply to give its hands employment. Like a Western concern which lately took a similar contract at low figures, for the same reason, the Virginia firm owns, indirectly, the village in which its employees reside. If its men obtain no work, they, of course, have nothing with which to pay rent, and in the investment made by the manufacturing concern, through its auxiliary land or improvement company, thus ceases to make returns. It thus becomes imperative that the manufacturing company shall obtain contracts even if no more than wages for its employees can be secured therefor beyond the cost of material."

These surmises and statements are not correct. The Roanoke Machine Works do not by any means own Roanoke. Instead of taking work simply to give their hands employment, they have had to largely increase their force, bringing hands from other places, to keep up with their orders, and are reported as crowded with work. Instead of getting their iron in Pennsylvania, their bar iron comes from Richmond and their pig iron is made by the Crozer Furnace, which is only about a quarter of a mile from their works, and the contract, instead of being a losing one, was taken at profitable figures. The following letter from this company very effectually disposes of the false reports circulated in regard to this order:

ROANOKE MACHINE WORKS,

ROANOKE, VA., Feb. 8, 1886.

Editor Manufacturers' Record:

We have your favor of 3d inst., accompanied with clippings from papers criticising the order recently placed with us for box cars, and in reply beg to advise you that the clippings do not represent the case correctly.

In the first place, the bar iron is now being made by the Old Dominion Company, of Richmond. All of the pig iron for castings (except wheels) is being furnished by the Crozer people, whose furnace is our very

near neighbor; their property, in fact, is almost adjoining our machine works plant. The furnace itself is located about $\frac{1}{4}$ of a mile from our works.

The white oak is furnished along the line of the Norfolk & Western and Shenandoah Valley Railroads, within ten to fifty miles of our works, and at a much less figure than many other concerns pay for such lumber.

It is true that the wheels and axles are furnished by the railroad for whom the cars are being built—they specifying a certain make of wheels and axles. This, however, was the case with all bidders, and we found our location to be quite as advantageous in this respect as in others, for the reason that the greater part of the distance over which this material will be taken is by water instead of an all rail haul, which would have been the case with many others.

The bid was made flat footed, and based upon figures which will enable us to make some money.

Trusting that the above information will set us right in the matter, and thanking you for the interest you have taken, we are,

Yours respectfully,

ROANOKE MACHINE WORKS.

As this company has now demonstrated the ability of Southern car works to underbid their Northern competitors, in some cases at least, we hope to see a more vigorous effort on the part of Southern manufacturers to enter the field against all competitors. Take this one line of manufacturing for instance. How many places there are in the South where cars could be cheaply made! The Anniston Car Works, using them as an illustration, will probably soon be in operation, and a summary of their advantages will show why in this line of manufacturing the South ought to be very successful. At Anniston there is an abundance of pig iron, which can be had without the expense of \$3 or \$4 freight per ton, and hence about that much cheaper than the Northern car works can secure their pig iron; car wheels of the best quality and car axles are manufactured in Anniston, and the timber needed is abundant, and, like the pig iron, much cheaper than at the North. Here are the chief materials, all centered in one place, for making cars, their cost being much less than the prices that the Northern works must pay. Taxes are light and labor is less costly—owing partly to the cheapness of living in the South—than in the North. Is there any reason under these circumstances why these Anniston works should not be able to manufacture cars more cheaply than many Northern car works? And as with cars, so with many other things. Why should the South ship its lumber and its pig iron in their manufactured state to the North and buy them back in the shape of agricultural implements, hardware, furniture, carriages, wagons, &c., paying the freight both ways? Why not manufacture these things at home and thus not only save the cost of shipping to and from the North, but also furnish home employment to many hands, increase the value of all property and hasten on the growing prosperity of the South?

This good work is already in progress, as the weekly issues of the MANUFACTURERS' RECORD abundantly prove.

The "Starving Mechanics" of London.

Last week's cable dispatches were largely devoted to accounts of the great riot in London. We were told that "The 'Starving Mechanics' of London to-day held a mass meeting in Trafalgar square, around the Nelson monument, and it resulted in a riot. The proceedings were opened with the assemblage of ten thousand men." A large part of the city was taken possession of by a mob, that soon numbered 50,000 people. In the speeches it was demanded that Parliament should "start public works, to give employment to tens of thousands of the deserving men who were out of work, through no fault of their own, but because of bad government, * * * 'The time had arrived' it was claimed, 'for Parliament to legislate for the relief of the depression in English agricultural industry.' Some of these orators went so far as to warn the government, that 'although the starving mechanics of London were now trying to draw attention to their needs by quiet and peaceful agitation, they were bound to have bread, and would get it by attacking the baker's shop if the government did not come to their relief.' It was also 'declared that the people had assembled to summon Parliament to at once relieve the distress of the British workingmen, and that the people wanted the question settled at once, otherwise a revolution was inevitable.' Will our free-trade friends please explain all this? They have been telling us of the beauties of free trade, and pointing to England as a bright and shining example of what it would do; they have claimed that all we needed to make this country prosperous was to adopt the free-trade policy of England.

England has free trade to her heart's content. She has had the "markets of the world," of which we hear so much, open to her merchants and manufacturers. She now has and has had for several years an almost unexampled business depression. Her ship yards are comparatively idle, her ocean steamers are laid up by the hundred because they can find no employment, her factories, iron works and other industries are closed or running on short time, her mechanics have been forced to accept wages extremely low, even for that country, or else quit work entirely, and thousands of willing workers can find no work to do. Poverty and distress are everywhere, notwithstanding the great efforts of systematic philanthropy to relieve the suffering. Instead of brightening skies, the business world of England shows even deeper depression. All this in free trade England!

In protected America we see our business interests rapidly improving, new mills and works going up, those long idle with fires once more lighted, and the hum of industry heard, many works crowded with

orders, and best of all, a voluntary advance being made in wages by many manufacturers. With the exception of one or two industries in which there is some labor trouble, the whole prospect is encouraging, and everything indicating a period of much activity, despite the uncertainty of Congressional action upon the silver and the tariff questions. Do our free trade friends want us to give up all this, simply to follow England's teachings?

Taxation South and North.

The census demonstrated some most interesting facts. The figures have been grouped very instructively and some very valuable lessons may be drawn from them. The statistics of per capita tax in the different States are a matter of economic value in more respects than one. They are especially important in showing that the South is a desirable section to locate in, to secure freedom from the burdens of government in their heavier phases, and when this privilege is associated, as in the case of the South, with better climate, superior natural resources, freedom from bleak winters and killing cold, and all the advantages of our sunny region, the inducement to give the South the preference as a place to immigrate to, is irresistible. Let us take the per capita tax in the five New England States:

STATES.	Per capita tax.
Maine.....	7.99
New Hampshire.....	7.77
Vermont.....	5.25
Massachusetts.....	13.64
Rhode Island.....	9.74
Connecticut.....	8.62

We will now take the six Southern States of the Atlantic coast:

STATES.	Per capita tax.
Virginia.....	3.07
North Carolina.....	1.37
South Carolina.....	1.85
Georgia.....	2.08
Florida.....	2.25
Alabama.....	1.63

We will show the tax in six of the Western States, in order to demonstrate that the advantage of low taxation still belongs to the South in comparison with any section. We will select the six lowest Western States:

STATES.	Per capita tax.
Kansas.....	5.00
Indiana.....	6.24
Michigan.....	5.27
Wisconsin.....	5.27
Minnesota.....	5.37
Illinois.....	6.24

In the far Western States the same proportion holds. For instance we find that the Pacific States stand thus:

STATES.	Per capita tax.
California.....	14.60
Oregon.....	6.37
Nevada.....	14.00
Colorado.....	11.07

We have given some of the details, and now we will present the average by sections:

SECTIONS.	Per capita tax.
New England States.....	10.47
Middle States.....	8.63
Western States.....	6.97
Southern States.....	3.46

The difference in the rate of taxation between the New England States, for instance, and the Southern States is prodigious and amounts to a vast aggregate income. To individuals it is a great difference, making on large properties a heavy percentage. As we stated at the outset, when we connect this tremendous disparity in taxation with the marvellous wealth of

resources in the South, and add to this the immeasurable benefit of a climate that never freezes up, that permits unobstructed labor all the year round, that allows agriculture to be pressed ten months in the year, and we have a superiority of natural attraction that is irresistible. The census man has ingeniously arranged the States into a pyramid to illustrate the matter of taxation, and upon the broad expanding base with California to represent the substratum of a burdensome taxation, there rises in diminishing onerousness the outline of State and other expense to pay for the benefit of every kind of government, in which the South caps all as the glorious apex of the suggestive pyramid, representing the greatest exemption in this broad country from the depressing burdens of government support. The value and the significance of this can not be overestimated, and the more it is considered the stronger recommendation does it appear. It is one of the many recommendations that must render the South attractive to the world's emigrants, seeking desirable homes. It must and should be a potential factor in inducing the seekers for the best locations in which to live to choose the sunny South.

Railroad Commissions.

The Baltimore Sun, of February 13, published dispatches from Charleston, S. C., and Boston, Mass., as to the workings of the railroad commissions in those two States.

The dispatch from Charleston, referring to the act creating the commission, says:

"The act tended to discourage investments in railroads, and for a time at least put a stop to all extensive railroad building in this State. It is said to have prevented the construction of several lines of railroads, and notably among these may be mentioned the proposed extension of the John M. Robinson line, which was to have run through this State from the Northeastern boundary to some point on the coast, or to the Georgia line.

In 1883, however, so great had been the dissatisfaction raised by the passage of this law that the General Assembly amended the act so as to allow railroads to make their own rates, the schedules made by the roads to be first submitted to the railroad commission.

* * * Under the operation of the law as it now stands, and as it is administered by the present commission, there is very little ground for complaint. The rates, which have been prepared by the railroad companies, have proved satisfactory to the commission, and have been accepted by all concerned as "just and reasonable." The commissioners are conservative in their tendencies. The severest complaint made against them is that they do so little, and that their main purpose seems to be a demand upon the State treasurer for their salaries the moment they become due."

In an editorial on the subject, the Sun says:

"Their general working, it will be observed, has been beneficial to all parties concerned."

The above facts are, in themselves, the strongest sort of an argument against railroad commissions. It is admitted that the commission in

South Carolina, as long as the provisions of the act creating it were carried out, restricted further railroad building, retarded the development of sections that would have been given railroad facilities, and proved a hindrance to the State's progress. When, however, the commission was shorn of its arbitrary powers, and became simply a figure-head, the duties of its officers being limited to drawing their salaries promptly and regularly, then its "general working was beneficial to all parties concerned." That is, the commission was a source of injury to the State as long as it was active in the performance of its duties, and was "beneficial to all parties concerned" only when it became inoperative.

What possible reason can there be why any State should establish, or allow to exist, an office that is admittedly either a barrier to its development or a useless encumbrance? An office that in order to avoid working harm to the State's interest must become a nonentity, except with regard to the salaries of those who fill it?

Editorial Notes from Polk County, N. C.

Polk county, N. C., is greatly interested at present over the possibility of having another railroad passing through the county-seat—Columbus—and Tryon and reaching Greenville, S. C. The county commissioners are negotiating with three companies, and the prospects for a favorable response from one of them is said to be very good. The Carolina Central Railroad Co., of which Col. John M. Robinson, of Baltimore, is the president, is extending its line from Shelby towards Rutherfordton, and it is thought that possibly they can be induced to run their road through Polk county and on to Greenville. The other two companies are the Boston Construction Co., now building a road in Rutherford county, and the Baltimore & Ohio, which is reported to be considering the advisability of the early extension of its lines from Lexington, Va., to the South.

* * * *

The people of Polk county are very much in earnest in wanting another railroad, the only road now passing through the county being the Asheville & Spartanburg. They are willing to make a liberal county subscription, \$75,000 being named as the amount which would be voted. Quite liberal private subscriptions, it is said, could also be secured, one property owner being reported as being not only willing to subscribe liberally for the bonds of the company, but as having stated that, in addition to that, he would make the company a present of \$10,000. Should any one of these companies build through Polk county their objective point would naturally be Greenville, S. C., and Greenville county is said to be willing to double Polk county's subscription.

A railroad passing through this section would develop a fine country of great natural resources and advantages. At present the transportation facilities are very limited. The Asheville & Spartanburg Railroad (the only railroad in the county) being in an unfinished condition, passenger travel as well as freight business is much restricted. There is very large mineral and timber wealth, and the agricultural possibilities are great. The river bottom lands are rich and productive, while the hillsides and mountainland will not only yield large crops of tobacco, but will also produce in great abundance the most luscious fruits, such as peaches, pears, apricots, grapes, plums, cherries, &c. In fact, the advantages for fruit culture possessed by this section are almost sure to make it the center of a great fruit business in the near future. Not only does fruit grow in great abundance and of the finest flavor, but owing to the peculiar protection from the cold afforded by the mountains that break the force of the Northern and Western winds, it ripens so early in the season that its shipment to Northern markets will prove quite profitable when adequate transportation facilities are provided.

* * * *

Of equal importance with the agricultural advantages of this section is its remarkably fine climate. Free from all malaria; dry, bracing and balmy, its good effect upon lung and throat troubles being very marked; cool in summer and comparatively warm in winter; the climate alone will attract many visitors as well as permanent settlers as the country becomes more widely known. There is, of course, some very cold weather when warm fires and heavy wraps are needed, but such spells are said to be of rather rare occurrence and generally of short duration. And even then the atmosphere is so thoroughly dry that the cold is free from the penetrating effect so unpleasant where the air is raw and damp. The writer had a good illustration of the beauties of this climate during the last few days. On Feb. 5, 6 and 7 the weather through the North and in Maryland and Virginia was intensely cold, with heavy snow storms. The papers were filled with reports of the intense cold, the railroad blockades from snow 14 and 15 inches deep, harbors frozen up and great suffering among the poor. During those same days and up to present writing the weather up here in Polk county, in the mountains, has been as balmy as on a spring day, with the thermometer at 12 o'clock every day for nearly a week reaching from 75 to 82 in the sun.

* * * *

Let it not be imagined though that this is an earthly Paradise where bad weather is unknown. There are rainy days here as elsewhere. Occasionally there is a good snow, sometimes a sleet, and sometimes a lowering of the temperature, that in an atmosphere less dry would be exceedingly

disagreeable, but on the whole a better climate, all things taken into consideration, would probably be very hard to find. Days of bright sunshine, when out-door life is a pleasure, are very numerous, and far outnumber the cloudy days. And then the scenery is attractive enough to satisfy the most exacting. Good railroad facilities and good well-built hotels would in a few years make this region a great winter resort. There are many magnificent sites for large hotels all through this "Thermal Belt." Hotels here have a double advantage in having both winter and summer business. In summer this whole mountain region of Western North Carolina is overrun with visitors, mainly from the "low country" of the South, though there is a steadily increasing number of Northern and Western people, drawn here by the magnificent scenery and the delightful summer climate. In winter many people from the North, seeking a pleasant climate, in search of health, come to this part of Carolina. The summer business is already very large, and will increase just as rapidly as hotel accommodations are provided. The winter business can also be made very large when railroads have been constructed, good hotels built and the advantages of this section made known to the general public. All this will be done in a comparatively few years, and then added to their heavy passenger traffic, the railroads passing through Polk county will find a profitable freight business in the transportation of minerals, lumber and fruit, and other agricultural products.

THE MANUFACTURERS' RECORD has persistently upheld the intrinsic value of Southern cotton mill property, notwithstanding the severe depression, and lately we have called attention to the signs of returning prosperity to this industry. The Atlanta Constitution reports:

Mr. C. A. Collier, one of the largest stockholders in the Eagle and Phenix mill, of Columbus, says: "The Eagle and Phenix consumes more cotton than any mill in America. Its yearly reports are therefore significant. At the annual meeting this week the report showed larger sales in the past three months than any three months in the mill's history. The traveling men have been called in because the mill is behind its orders. The Swift Manufacturing Company reports just such activity. We were shown the bins for storing surplus goods, and they were bare."

"Have profits been lowered to create this demand?"

"Just the contrary. The Eagle and Phenix lost money steadily for the first nine months of the year. In the last three months it recouped its losses and made \$17,000. It looks in the Southern cotton mills as if the 'good times had come again once more.'

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Our Birmingham Letter.

[Special correspondence MANUFACTURERS' RECORD.]

BIRMINGHAM, ALA., February 15, 1886.

This thing is getting monotonous! Iron is just as steady as it was when I wrote last week, if not more so. The market remains firm and active at \$16.50 for No. 1 foundry at furnace—just as it has been for four or five weeks. Stocks decline to accumulate, and the figures given in my latest previous letter, about 5,000 tons of unsold iron in the whole district, will do for the present date, if anything with some abatement, because the demand is fully up to the combined producing capacity of the furnaces, and, if anything, something beyond. Notwithstanding the recent advance in freights enacted by the Ohio river pool, Birmingham pig iron continues to move toward Louisville, Cincinnati, St. Louis and Chicago, as fast as our iron masters can make it, and there is a large demand from New York, sufficient to absorb a much greater quantity of metal at present prices, than can be comfortably furnished with current stocks and facilities, in addition to the Western and Northwestern orders. In every other department of the iron trade the state of business is something more than satisfactory. The rolling mill, foundries, machinery, pipe, and all the other works are working on extra time, and still keep away behindhand with their orders, which indeed are steadily increasing with the nearer approach of spring.

* * *

The eminent architect, Mr. Walters, C. E., of Louisville, who has charge of both the new Union station and of the new hotel, was in the city last week, and promised that both structures should be ready for occupancy by the 1st of October next. Local architects are working extra draughtsmen against the arrival of the active building season, which will come along now in a very few weeks. The weather now could pass for pretty good April weather in Baltimore, and birds and buds all around indicate that the early spring of this latitude is close at hand. In the meantime the active movement in real estate, heretofore noted, continues increasingly. A good deal of business property in favorable locations changed hands last week, and conveyances of the best class of residence property are reported daily. There is such a general impression that prices of desirable real estate will advance during the next 90 days, that a number of holders have withdrawn their offerings from market, being unsatisfied with ruling prices.

* * *

It is not to be doubted that a great deal in connection with the future of Birmingham depends upon our ability to establish the steel industry in this vicinity. The recent visit of Mr. Jacob Reese, already alluded to in these letters, has stirred the discussion of our ability to accomplish such a movement rather considerably. Mr. Reese spent a couple of weeks among our practical coal and iron men, engineers and metallurgists, and became quite convinced that there was nothing lacking to warrant the profitable maintenance of the Basic steel industry in the city and the district. Coming from such an undoubted authority this opinion has been of value, although it was not needed to satisfy people who keep informed on such matters that our ores were well enough adapted to the production of steel by some of the processes other than the Bessemer. There are ores in Europe—in Belgium, for example—much like the Alabama mineral, and they make good steel. All this appears to be contrary to the opinion of Mr. Edmund C. Pechin, M. E., of Cleveland, Ohio,—that is, if he is correctly quoted in the press. The newspaper reports I have seen make him say that the ores around Birmingham are unfit for the manufacture of Basic steel, while he

concedes that the ores in the neighborhood of the Tecumseh furnace, in Eastern Alabama, are peculiarly well-fitted for the same purpose. The Tecumseh ores are brown hematites, and as far as I can learn, are identical with the brown hematites plentifully found in this vicinity. If Mr. Pechin has any well defined scientific reason for holding that the red hematites of Birmingham will not make satisfactory Basic pig, I do not hear that he has given the public benefit of it. I do not know a man in iron or steel circles for whom I entertain a higher personal or professional regard, and, after proper investigation, I do not know one whose opinion would be entitled to greater weight; but I do not believe he has given the matter in hand much attention, and, very likely, is not anxious to. The successful founding of a great steel interest at Birmingham on the basis of Alabama ores would not particularly benefit the traffic in Lake Superior Bessemer ores, with which Mr. Pechin has been so long and so honorably connected, and I do not think that he would travel far, or be willing to live on bread and water long, for the sake of being convinced that the days of Bessemer monopoly are numbered. I am equally sure that, once convinced, he would own up, like the honest gentleman I know him to be. A few days spent in these parts would convince him, I am sure.

* * *

Not a little interest has been excited, at least locally, by the movements of the principal proprietors of coal lands in Walker county, which adjoins this one on the west. Until recently the Walker county portion of the Warrior coal field has attracted comparatively slight interest, being remote from actual developments and transportation. At the same time it has been well known that some of the richest coal territory in the State was to be found in that direction, and many of our citizens in company with others in Selma, Montgomery, Mobile, New Orleans and Memphis, have made considerable investments in Walker county property. The extension of the Georgia Pacific, which will be pushed this year, and the promised construction of the Memphis, Birmingham & Atlantic Railway, will bring a large part of these coal properties into market, and that important fact underlies what the coal land owners are trying to accomplish. The meeting of these gentlemen on the 10th, mentioned prospectively in last week's letter, occurred according to programme. A number of individuals, firms and corporations were present in person, by officers, or by proxy. Of the 400,000 acres, coal area estimated for Walker county, 244,700 acres were represented in the meeting, the object of which was to effect a consolidation of the scattering interests, and to crystallize the Walker county coal proprietary into one large corporate body. This would put a stop to competition among holders and tend to much advance the value of coal lands in the district. It must be admitted that, however profitable or desirable this proposition may appear to the coal land owners, it has not met with unqualified public approval. An impression seems to be abroad that the effort is one in the direction of monopoly. However that may be, the action of the owners in forming a combination like that contemplated would be quite harmless. Granted that they succeed in holding up 240,000 acres of coal lands under a single organization! The Louisville & Nashville and the other railways have together perhaps 160,000 acres more, which none of them are anxious to sell except for actual development. Anybody who wants to mine coal and bring it to market, and guarantee reasonable development to the property, can get all the first-class coal lands he can use from the railway companies on extremely favorable terms. As long as that is the case monopoly is powerless to arrest development. After a full discussion of the possibilities, a committee, to formulate a plan, was appointed, and the coal land owners adjourned to meet again March 11. In the meantime they will consult stockholders or partners, and be ready for final action next month.

G. B. WEST.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

The contract for erecting an electric light plant for Mobile, Ala., has been let to the Brooklyn Electric Construction Co., at \$19,500.

Charles Pierce, Indianapolis, Ind., has received the contract for erecting, at Birmingham, Ala., a depot to cost \$45,570, an express office to cost \$9,000, and a car shed to cost \$17,000.

A \$30,000 hotel is to be erected at Monte Sano, three miles from Huntsville, Ala.

Adam Glass, O. L. Crampton, Rufus Dane and others have formed a coal company at Mobile, Ala., to develop mines in Walker county.

ARKANSAS.

Mr. Steher, of St. Louis, has purchased a site of several acres near Paragould, Ark., for a large stave factory, which he will erect at once. The machinery has been ordered.

N. S. Storrs and others, of Springdale, Ark., will organize a company, to start a canning factory, with daily capacity of 25,000 cans.

John O'Day, Springfield, Mo.; W. M. Fishback, Fort Smith, Ark.; James Dunn, A. Douglas and others have incorporated the Fort Smith & Southern Railroad Co., capital stock \$3,500,000, to build a road, 150 miles long, from Fort Smith to the Red river.

FLORIDA.

D. L. Way and J. Albert Merritt, Sanford, Fla., are trying to organize a company to establish an ice factory.

A. G. Stowell has started a jelly factory at Haines City, Fla.

It is reported that a company has been formed to establish a sugar farm and a refinery at Kissimmee, Fla., with a daily capacity of 10,000 pounds.

D. P. Warner will engage in the manufacturing of orange wine at Fairbanks, Fla.

P. L. Mofton, Sanford, Fla., will receive bids until February 20 for rebuilding the machine shops of the South Florida Railroad Co., previously reported as burned.

GEORGIA.

J. B. Florence, Powder Springs, Ga., will put some new machinery in his flour mill.

Joseph Vickery, of Toccoa, Ga., and R. D. Yow have bought the cotton factory of the Shoal Creek Manufacturing Co., Parker's Store, Ga.

The Brunswick Light & Water Co., Brunswick, Ga., previously reported, have purchased sites for their gas works and water works and will begin work soon.

KENTUCKY.

The Louisville Brick Co., capital stock \$35,000, has been incorporated at Louisville, Ky., with R. T. Colston as president, Brent Moore, vice-president, and E. B. Fox, secretary and treasurer.

The Lexington Grooved Picket Fence Co., capital stock \$12,000, has been incorporated at Lexington, Ky., to manufacture fences, with H. C. Clay as president; J. M. Hocker, Jr., vice-president, and C. P. Harp, secretary and treasurer.

The Kentucky Cremation Society has been organized at Louisville, Ky., to erect a crematory, with W. F. Norton as president, and E. C. Bohne, secretary and treasurer. The capital stock is not to exceed \$100,000.

Bills have been introduced in the Kentucky legislature to incorporate the Kentucky Household Gas Supply Co., capital stock \$50,000, with Horace T. Hanford, F. Fox, Jr., and W. L. Breyfogle as incorporators, and the Kentucky Rock Oil Co., of Paris, capital stock \$5,000,000.

\$7,000 has been raised at Fulton, Ky., towards organizing a stock company to erect a furniture factory.

LOUISIANA.

Bertrand Laclaverie, Adolphe Capiton, Ferreol Artigue, Joseph J. Chapon, Louis Vigires, Albert Weber, and Guillaume Peres as directors, have incorporated at New Orleans, La., the Arabian Disinfectant Co., capital stock \$50,000, to manufacture disinfectants.

James Jones will erect a saw and planing mill at New Orleans, La., if permit is given.

The J. A. Blaffer Brick & Lumber Co., capital stock \$75,000, has been incorporated at New Orleans, La., with John A. Blaffer, James Gill, H. L. Blanchard, N. R. Pepin and G. A. Blaffer as incorporators and directors, to manufacture all kinds of lumber and bricks.

MARYLAND.

David Eavland will erect a saw mill near Greensborough, Md.

Moses Brownold, Gabriel Rosenfeld, Maurice J. Lehmayr, Charles Kaiser and George J. Roche have incorporated at Baltimore, the United States Prismatic Light Co., capital stock \$100,000, to manufacture lenses.

The Ford Acme Renovator Co., reported last week as incorporated at Baltimore, will locate their factory, for manufacturing a cleansing compound, at 19 Commerce street.

The Baltimore & Calverton Live Stock & Abattoir Co., capital stock \$200,000, has been incorporated, at Baltimore, by Charles Rohr, Elias Rohr, Harry E. Reinhard, Jacob Meyer, Jacob Rose and others, to slaughter cattle, sheep and hogs, and manufacture and dispose of the offal.

Swift & Ould, Perryman's, Md., have erected a corn and feed mill.

A company is being organized at Cumberland, Md., to bore for natural gas and oil.

The Bay Ridge & Annapolis Railroad Co., capital stock \$50,000, has been incorporated by Joseph B. Reed and H. D. Hughes, of Philadelphia; J. Wirt Randall and James H. Vansant, of Annapolis, and Hugh L. Bond, Jr., of Baltimore. The road will extend from Bay Ridge to Annapolis, Md.

William Funk & Co., Greenfield, Md., have erected a saw mill.

MISSISSIPPI.

Bills have been introduced in the Mississippi legislature to incorporate the New York, Mexican & Texas Air Line Railroad Co., and the Natchez Compress & Warehouse Co. This company will build the compress at Natchez, Miss., previously reported.

NORTH CAROLINA.

The Piedmont Ranch & Lumber Co. will, it is reported, build a hotel, a flour mill and a saw mill at Piedmont Springs, N. C.

R. H. Cowan, Salisbury, N. C., is erecting a saw mill.

Sugg & Ormond are erecting a machine shop and foundry at Greenville, N. C.

Price & Loafman have erected corn mill machinery at Ringwood, N. C.

W. H. Weedon, Newton, N. C., will build a spoke and handle factory.

SOUTH CAROLINA.

Machinery has been purchased for a steam laundry to be started at Columbia, S. C.

Barton & Smith are erecting a large planing mill at Greenville, S. C.

The Pelzer Manufacturing Co., Pelzer, S. C., will build a large addition to their cotton mill, to be filled with new machinery. The contract for building 30 houses for new operatives has been let.

J. C. Reville has started a sash, door and blind factory at Florence, S. C.

TENNESSEE.

H. H. Williams, L. H. Hodge, J. O. Kirkpatrick, J. B. Ranson, J. H. Smith and W. D. Robeson have incorporated at Murfreesboro, Tenn., the Murfreesboro Red Cedar Works, to manufacture all kinds of wooden ware.

R. H. Mason & Co. will build a saw mill at Daylight, Tenn., soon.

B. F. Hester, Union City, Tenn., will erect a saw mill; wants catalogues and price-lists of machinery.

The capital stock of the East Tennessee Tobacco Manufacturing Co., reported last week as to be incorporated at Greeneville, Tenn., is \$7,000.

The Bluff City Stove Works, Memphis, Tenn., have increased their capital stock from \$75,000 to \$100,000, and will enlarge the capacity of their works.

James C. Warner, of the Warner Iron Co., Nashville, Tenn., and others have purchased the property of the Aetna Iron Co., in Dickson county, Tenn., and will erect an iron furnace. The capacity will be 40 tons.

William Rose, it is stated, will enlarge his stave factory at Chattanooga, Tenn.

Mr. Palmer contemplates starting a soap factory at Chattanooga, Tenn.

A. A. Strong & G. H. O'Mealy have, it is stated, erected a hub and spoke factory at Cowan, Tenn.

The Citico Furnace, at Chattanooga, Tenn., has blown out for repairs.

The Dayton Coal & Iron Co., Dayton, Tenn., have blown in one of their new furnaces, previously reported as being built.

TEXAS.

The Farmers' Alliance are making arrangements to build a roller flour mill at Burleson, Texas.

Hillsboro, Texas, has appropriated \$10,000 to erect a school building.

Proposals will be received for building a court-house at Vernon, Texas, to cost about \$85,000.

A large saw mill is to be erected at Atlanta, Texas.

The Farmers' Alliance, of Montague county, Texas, will build a \$15,000 roller flour mill.

Mr. Patton and others, of Llano, Texas, have leased a tract of mining land near that place, which they will develop.

The Pearsall Mill Co., capital stock \$50,000, has been chartered at Pearsall, Texas, by R. W. Hudson, N. S. Scovill, C. W. Cox, O. A. Koehl, R. S. Long and others.

M. J. Fitzgerald, O. H. Hanna, S. R. Bullock, Emil Woltman and D. W. Duryea have incorporated, at Denison, Texas, the Denison City Water Co., capital stock \$200,000.

H. M. Mundy, J. J. Mundy and L. L. Mundy have incorporated at El Paso, Texas, the City Street Railway Co., capital stock \$25,000.

The Capital Ice Co., Austin, Texas, are putting new boilers in and making improvements at their factory.

T. A. Carter, Thomas Don and M. C. Wright have chartered at Fort Worth, Texas, the Star Cracker & Manufacturing Co., capital stock \$20,000. A large factory will be fitted up, the machinery for which is being negotiated for. A spice mill will be operated in connection with the factory.

The project of establishing a woolen mill is being worked up at Albany, Texas.

Several thousand dollars have been subscribed at Valley Mills, Texas, towards building a flour mill.

Negotiations are being made by capitalists for the establishment of a woolen factory at Belton, Texas.

S. W. Brooks has received the contract for erecting the court-house and jail at Hidalgo, Texas, previously reported. The cost will be about \$20,000.

Proposals are invited for building a court-house at Snyder, Texas, to cost \$20,000.

The flour mill reported last week to be erected at Dallas, Texas, by Todds & Stanley, will be erected for S. H. Cockrell & Co., owners of the Todd Mills. It will have a capacity of 250 barrels, making their total capacity 500 barrels daily.

A courthouse to cost about \$50,000 is to be built at Belleville, Texas, and a \$60,000 courthouse at Kaufman.

Williams Bros., Daingerfield, Texas, have fitted up a factory for manufacturing wagons and plows.

VIRGINIA.

The Pemberton & Hill Manufacturing Co. has been chartered at Richmond, Va., to manufacture tobacco, with Charles D. Hill, as president; Thomas W. Pemberton, vice-president, and Charles E. Kersey; G. D. Wishart, of Liverpool, Eng.; John S. Wishart, of St. Louis, and M. J. Dohan, of Philadelphia, Pa., as directors. The capital stock is not to exceed \$150,000.

G. W. Simpson has recently started a handle factory at Salisbury Furnace, Va.

Sult, Weiser & Co., Wytheville, Va., will fit up a building for a carriage factory.

The Goodson Water Works Co. has been chartered at Goodson, Va.

Bills have been introduced in the Virginia legislature to authorize Warrenton to erect water works, and to incorporate the Ideal Beach Railroad Co., to extend from Norfolk to Sand Ridge, with John L. Roger, Thomas J. Notting, R. S. Dodson, F. M. Whitehurst and others as incorporators; the Henderson, Roanoke & Virginia Railroad Co., with Geo. P. Tarry, Charles D. Hill, Charles Watkins, R. E. Young and others as incorporators; the Surry & Smithfield Railroad Co., and the Bristol Slate Mining Co.

WEST VIRGINIA.

The Shenandoah Milling Co., Charles-town, W. Va., are refitting their mill with roller process machinery, with capacity of 75 barrels per 24 hours.

Work will soon be commenced on the new water-works at Wellsburgh, W. Va., previously reported.

The Camden Consolidated Oil Co., Parkersburg, W. Va., will, it is reported, erect 13 additional stills and a plant for manufacturing gasoline at a cost of about \$25,000. The building of paraffine works is also contemplated.

Akin Harrah has purchased and will locate a steam saw mill at Meadow Bluff, W. Va.

**LOCKWOOD, GREENE & CO.
MILL ENGINEERS**

Office, 65 Westminster St., Providence, R. I.,
Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

BURNED.

Charles Steven's gin, near Monck's Corner, S. C.; loss \$2,500.

The Big Spring Flour Mill, owned by the Roanoke Land & Improvement Co., two miles from Roanoke, Va.

The flouring mill of John L. Kerver, near Frederick, Md.; loss \$4,000.

Mr. Garcia's gin, near Roma, Texas.

The flouring mill of Samuel M. Kefauver, one mile from Middleton, Md.; loss \$9,000.

Martin Helton's jug factory, near Jacob's Fork, N. C.

Alfred Hall's saw and grist mill, in Irwin county, Ga.

The flouring mill of W. T. Cunningham, Pamplin City, Va.

The bark mill of C. E. Heald, at Lynchburg, Va.; damaged \$2,000.

J. H. Hall & Son's tobacco factory, at Reidsville, N. C.

The flood last week at Port Deposit, Md., damaged Barnes & Archer's sash and door factory, \$5,000; W. W. Nickle's carriage factory, \$4,000; J. J. Buck's saw mill, several thousand dollars, and wrecked the planing mill of S. C. Rowland.

William J. Payne's saw mill, in Dorchester county, Md.

Large Saw Mill.

CHATTANOOGA, TENN., Feb. 13, 1886.

Editor Manufacturers' Record:

We have placed an order with the Stearns' Manufacturing Co., of Erie, Pa., for a complete mill outfit, consisting of one of their large (No. 1) double mills, a carriage to cut 45 feet long, with Prescott steam feed; gang edgers, automatic trimmers, live rolls, 18x24 engine, battery of 4 boilers, etc. We calculate to get 50,000 feet per day from this mill. The mill building will be 42x150 feet, with engine and boiler room separate. It is located on the Coosa river, in St. Clair county, Ala., 38 miles east of Birmingham, and is connected with the Georgia Pacific Railway by a half mile spur track. We hope to have it in operation by the 1st of June. We are now grading the side track and making excavations for foundations.

THE EMPIRE LUMBER CO.

Fence Factory.

ROME, GA., Feb. 15, 1886.

Editor Manufacturers' Record:

The Georgia Fence Co. has established a factory at Rome, Ga., which is now in full operation, supplying the great demand for bar wire and picket fence. J. D. PONDER.

Building New Works.

HOPKINSVILLE, KY., Feb. 15, 1886.

Editor Manufacturers' Record:

We are now building our shop, 35x100 feet, two story, and will move our shop to this place about March 1st, 1886. We expect to make mill supplies a specialty, as well as doing a general repair business. We will enlarge our shops when we move here.

C. W. METCALFE.

Cotton and Woolen Mill Wanted.

CORSICANA, TEX., Feb. 9, 1886.

Editor Manufacturers' Record:

Our little city wants a cotton and a woolen mill, and our citizens will take stock readily to help a man or set of men start if they want help of this kind. Of course, would take stock with persons of known ability and integrity. Want such party to represent, say $\frac{1}{2}$ to 4-5 of necessary capital. Our corporation will be liberal in franchise and exemption from taxes. We have fine water-works; large oil mill; flouring mill, built in 1885; will soon double its capacity. We are now building an elevator with capacity of 75,000 bushels. M. DRANE & SON.

250-Barrel Flour Mill.

DALLAS, TEXAS, Feb. 13, 1886.

Editor Manufacturers' Record:

We have given the contract for the erection of a 250-barrel mill to Messrs. Todd & Stanley, of St. Louis; expect to have the mill completed by June 1st. Our capacity will then be 500 barrels flour per day. The question of building a 500,000 bushel elevator is now being agitated, but as yet nothing definite has been done.

S. H. COCKRELL & CO.

NEW ORLEANS, LA., Feb. 14, 1886.

Editor Manufacturers' Record:

This company has purchased all the assets, &c., of the Riverside Saw and Planing Mills and the Riverside Brick Works, which two establishments have consolidated, with a capital of \$75,000, under the name of

THE J. A. BLAFFER BRICK & LUMBER CO.

Flour Mill.

MCGREGOR, TEX., Feb. 9, 1886.

Editor Manufacturers' Record:

I am building a new process steam flouring mill of 100 barrels capacity per day.

J. W. KIRKPATRICK.

To Manufacture Machinery.

MARION, ALA., Feb. 13, 1886.

Editor Manufacturers' Record:

We have organized for the purpose of manufacturing agricultural machinery. We will begin at once.

NELSON, LEE & HOGUE.

Tobacco Manufacturing Co.

GREENEVILLE, TENN., Feb. 13, 1886.

Editor Manufacturers' Record:

The East Tennessee Tobacco Manufacturing Co. is organized, chartered and will go to work in the spring. Capital \$7,000. Will not build this year.

S. R. B.

MORGANTON, N. C., Feb. 15, 1886.

Editor Manufacturers' Record:

We have not yet determined whether we will start a factory at this place or Hickory.

JOHNSON & JARBIN.

Iron Furnace.

NASHVILLE, TENN., Feb. 12, 1886.

Editor Manufacturers' Record:

Some friends and I have bought a majority of the stock of the Aetna Iron Company, and will proceed to build a furnace plant at once.

JAMES C. WARNER.

Increasing Capacity.

TUSCALOOSA, ALA., Feb. 13, 1886.

Editor Manufacturers' Record:

The new machinery that we have bought is *en route*; will increase our output 15%.

TUSCALOOSA MANUFACTURING CO.

FAYETTEVILLE, TENN., Feb. 13, 1886.

Editor Manufacturers' Record:

I have put up an engine and machinery for sawing building stone and marble.

LEWIS PEACH.

Refitting Flour Mill.

CHARLESTOWN, W. VA., Feb. 15, 1886.

Editor Manufacturers' Record:

We are putting in a complete system of the John T. Noye's Rolls. Work is being done by the John T. Noye Manufacturing Co., and will be completed by the 1st of March. The capacity of our mill is 75 barrels in 24 hours. In connection with our flour mill we have two burs, which we use in making bolted corn meal.

SHERANDOAH MILLING CO.

Brick Yard.

VICKSBURG, MISS., Feb. 14, 1886.

Editor Manufacturers' Record:

Tanner & Gregory will commence the manufacture of brick and terra cotta piping by machinery as soon as the machinery can be got into position. Will use a Penfield machine with all the latest improvements. Expect to make brick a specialty and make them in large quantities.

TANNER & GREGORY.

Gas Works to be Enlarged.

BALTIMORE, MD., Feb. 16, 1886.

Editor Manufacturers' Record:

We contemplate increasing the capacity of our water-gas system as early as practicable.

CONSOLIDATED GAS CO.,

L. R. SMOOT, Secretary.

FLORENCE, S. C., Feb. 15, 1886.

Editor Manufacturers' Record:

I have started a sash, blind and door factory. My factory is small yet; \$3,000 worth of machinery is what I have started with, but will soon replenish. The name of the factory is Florence Planing Mill.

J. C. REVILL.

Important Decision.

The decision of Judge Shipman, recently filed in the case of the Hartford Machine Screw Company vs. Reynolds & Co., is one of unusual interest and importance. The patent involved is reissued letters patent number 9,290, dated July 13, 1880, to C. M. Spencer, assignor to the plaintiff company, for an automatic machine for making machine screws. This machine is a very ingenious and important one, and is destined to work as great a revolution in machine screw making, as was wrought in the art of wood screw making by the introduction of automatic machinery. The plaintiff company has several hundred machines working in this city, and several hundred more are being operated in this and foreign countries by its licensees. The machine may be described generally as an automatic machine for making screws one after another upon the end of a long metal rod, which is fed intermittently into the machine. The invention of Spencer extends to the entire mechanism, by which a machine, for feeding a rod in the intervals between the fashioning operation, is made automatic. This general statement will disclose to persons acquainted with the art of screw making a general idea of the great importance of Spencer's improvements.

It may be said generally that Spencer's invention is threefold, consisting, first, in the mechanism for feeding and rotating the rod; second, in the devices for fashioning the screws, and third, in the severing mechanism. All these are automatic, and one attendant can oversee the working of a number of machines. The suit just decided related specially to the automatic feeding and rotating mechanism, consisting of a friction feed-tube within the mandrel of the machine in combination with the mandrel itself, and certain jaws and cams ingeniously contrived so as to time the several motions of the feed with reference to the work to be done by the fashioning and severing mechanisms. There is also in the combination a jaw closing sleeve, and the controversy, so far as infringement was concerned, related to the location of this sleeve. The defendants claimed that in their machine the sleeve being on the outside of the mandrel instead of within the mandrel, there could be no infringement. The court held this claim to be untenable and construed the plaintiff's patent so as to cover the feed combination, whether the jaw closing sleeve was within or without the mandrel.

The defence also claimed that the re-issue was void for expansion and that the invention was anticipated. The proof to the con-

trary was, however, overwhelming in its nature, and both claims were decided by the court adversely to the defendant, against whom the court ordered an injunction and an account.

The Hartford Machine Screw Company aside from being the owners of the Spencer principles, which may be described as the monitor or revolving turret system, are also the owners of the original Curtiss patents, the Stehlík or Swiss invention of a later date, and others for the making of screws automatically, which gives them control of all the popular forms of screw machines made automatic, and to construct a machine without conflicting with some of their patents.—Hartford (Conn.) Evening Post.

National Electric Light Association.

The National Electric Light Association held its annual session in Baltimore last week. Some interesting papers were read, among them being one on the "Proper Construction and Maintenance of Circuits," by Mr. E. R. Meeks, of Kansas City; "Electricity as an Illuminant," by Dr. Otto Moses, New York; "The History and Progress of Electricity," by Mr. R. W. Ryan, of New York, the official stenographer of the association; "Electric Motors," by Mr. T. C. Martin, of New York; "Steam Power as Applied to Electricity," by Mr. F. Fasick, of Fitchburg, Mass., A. F. Upton, of Boston, and others; "Underground Wires," by Mr. Ralph W. Pope, of New York; "Operating Expenses," by Mr. E. R. Meeks, Kansas City; "Incandescent Lighting," by Dr. Otto Moses, of New York; "Carbons and Globes," by Mr. Frank Ridlon, of Boston; "Relations of Electric Light Companies to Insurance," by Mr. C. J. Woodbury, of Boston. A paper prepared by Charles Von Depoell, of Chicago, on "Electrical Transmission of Power" was read, strongly advocating it as a motive power on street railroads.

The convention adjourned to meet in Detroit, Mich., next August.

Southern Progress.

The fact is that the South does not know its indebtedness to the Baltimore MANUFACTURERS' RECORD in systematically and ably presenting Southern resources and progress to the country. For several years that paper has done that work in the most thorough and pains taking manner, and the result has been a gradual and general spread of information about our section, from which we are receiving constant benefit. The leading papers all over the country are reproducing the RECORD's facts and figures, and are making them the theme of complimentary editorial comment.—Atlanta (Ga.) Capitol.

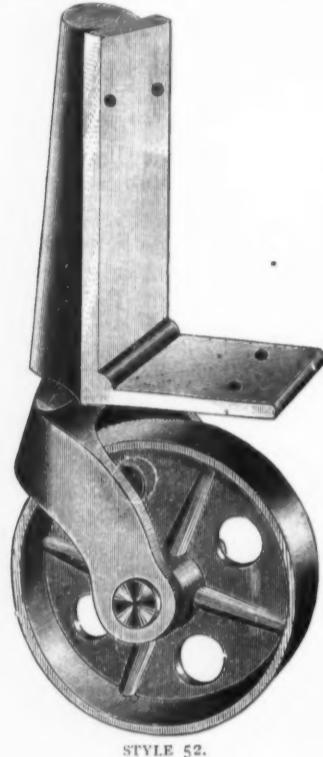
AN evidence of the success to be attained in journalism by energetic management, live, progressive policy, and persistent advocacy of the interests for which it was started, is exemplified in the MANUFACTURERS' RECORD, of this city, which this week entered upon its ninth volume. In championing the cause of Southern development it has rendered an incalculable amount of good in demonstrating the resources of the South. The paper is one of the handsomest typographical publications in the country.—Baltimore Every Saturday.

MR. WM. W. PATTERSON, P. O. Box 113, Staunton, Va., wants the address of parties who manufacture artesian well machinery.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

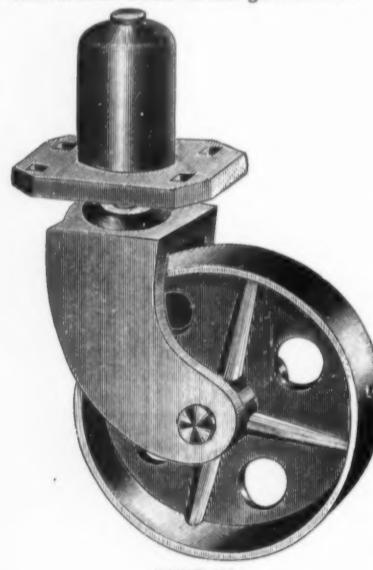
Clark's Standard Iron Wheels and Castors.

We illustrate herewith a class of hardware, the production of which, to some observers, may seem inconspicuous, but it is, nevertheless, an important industry, and one of interest to all connected with the hardware trade. Its importance would be readily understood could we produce statistics to show the vast amount of material of all kinds in manufacture, commerce and transportation that is handled daily throughout the world by means of this useful class of hardware.



STYLE 52.

Mr. George P. Clark, of Windsor Locks, Conn., has for many years made a specialty of the truck and track wheel business, and his goods are well-known and extensively used throughout the United States, and to a considerable extent in foreign countries.



STYLE 54.

We can in this issue but note briefly the single branches of his business indicated above, viz: that of iron truck wheels and their adaptation to some classes of work.

As regards the line of all iron goods, Mr. Clark has carefully studied the wants of the trade in this direction and claims to produce work alike acceptable to dealer and consumer.

His plain truck wheels are made of good iron, well molded, and are buffed and turned to insure their running smooth and true. In connection with the plain wheels he supplies, when ordered, substantial well-twined axles with bolt holes, suitable for immediate attachment to truck boxes, etc.

Style No. 60 is a popular form of iron wheel socket castor, for use on heavy tables, in mills, kitchens, laboratories, etc. The sockets are made in different sizes to fit legs from $1\frac{1}{4}$ " to 3" square.



STYLE 58.

Style 54 represents a short stem castor for mill and warehouse work. The stem of it, (as well as those of Style 52 and 60,) is of wrought iron, in all respects strong and well made. It is largely used in mounting box trucks.

Style 56 represents a stationary castor, admirably adapted for light boxes or baskets.

Style 58 is also a stationary castor, but with heavier stand than Style 56, and is intended for large boxes. It is often used in connection with bracket castor No. 52 in the manner shown by diagram No. 23. The manufacturer considers this much the best and cheapest way of mounting box trucks. Boxes mounted thus can be pushed forward, twined or handled in any way most quickly, and with the least exertion.

These cuts represent only the standard styles kept in stock by Mr. Clark; but he



STYLE 56.

has patterns of other shapes which can be made up at short notice.

He will be pleased to furnish catalogues free on application, and letters of inquiry will receive prompt and careful attention.

Railroad Commissions.

A writer in the Lynchburg News reviewing some of the arguments of the advocates of a railroad commission, and more especially those of some of the farmers of Virginia, that low freight rates from the West have



STYLE 60.

greatly injured the farming interests of that State, says:

New York and Boston are not asking for legislation to prevent the railroads from bringing the early productions of Virginia

and the South to their doors at cheap rates. Oh, no; that would be old fogeyism. Never in the memory of the oldest inhabitant has everything we want been more plentiful, or more conveniently gotten than at the present time. We have the delicate and luscious fruits of the tropics, the fresh fish of the ocean, the grapes of California, the coal of the West and the ice of the Kennebec, delivered not only at our doors, but put in your cellars and your pantries. Neither do I remember a time when the Virginia planter got more for his tobacco than now, besides contributing largely to the support of our government. And all this is brought about "by a discrimination of cheap freights over long distances" by the blessed railroads that are doing more for the country, more for the civilization of the world and the comforts of humanity than all else besides. Railroads and the printing press are the missionary crusaders. Railroads, therefore, are not the cause of the farming interests of Virginia being in "disrepute."

Like all other epidemics the railroad commission seems to be contagious; for now the different chambers of commerce have caught the political distemper (for I know not how else to distinguish it), and they have expressed about as many different opinions of the disease as there are members in the bodies; and each one has a different prescription for the railroad patient to swallow. So far I have seen no specified diagnosis of the disease those M. D.'s are attempting to cure.

Says one of our Lynchburg men: "I have to pay seven cents freight per bushel on corn from Amherst Court House, fifteen miles distant, when the miller can have it brought by the car load from Chicago for nine cents. Is that fair? Well, I must admit it looks very one-sided, to say the least of it, in favor of the Lynchburg miller, and against the railroads. But, unfortunately, there is no corn to ship from Amherst to Lynchburg. They are both buyers from the West; and both get the advantage of Chicago's low through freight. Now comes the Virginia miner with his ores and coal, and the tobacco men, to ship over long distances by a "discrimination of low freight" on an equal footing with the Chicago man and the Lynchburg miller. Without that they could ship nothing, even at the very lowest local rates a railroad could possibly handle and carry local freight. It would cost more than ores, coal or grain was worth to carry them to Philadelphia, New York or Boston. But says another: "The railroads charge more for carrying a barrel of flour within thirty or forty miles of Norfolk, Richmond, Alexandria or Bristol, than to the named points, and it costs no more to bring a barrel of flour from Chicago, 900 or 1,000 miles distant, than from Roanoke or Liberty—thirty miles—for thirty cents.

Now if we apply the Chicago through freight rate to Liberty, flour would cost about one cent per barrel freight; and if we apply the local rates of Liberty to Chicago, it would cost about 80 per barrel freight. So neither horn of the dilemma will suit.

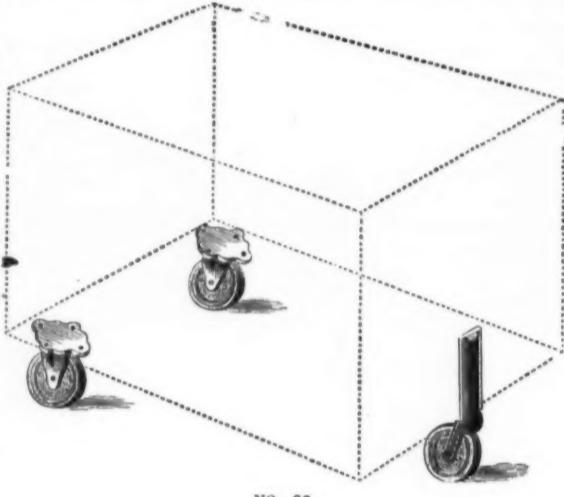
I am not one "one of them," like Mr. Slaughter, and not as well posted, but I know that when our roads have but a single track, the difference between local and through freight must be very great. Supposing a train starts from Lynchburg to Alexandria, and has to put off a barrel of flour or a bale of hay at every cross road, siding or depot on the line; it would take a long time to get through, and not only that, it would in-

terfere with the regular mail time and passenger trains, jeopardizing the lives of travelers. I don't think travel would go upon a road conducted in such a way. Railroad accidents are mostly caused by local freight trains. We can all remember before the consolidation of the Virginia and Tennessee and the Southside roads, travel had quit going on that line on account of the high bridge that was considered hazardous; but every freight train having local freight would be worse than that. With a through freight without stoppage it would be entirely different, and railroad men by a long experience have got this thing down to a point—but not yet perhaps to the lowest point.

Thirty years ago we had a war of railroad gauges, upon which was based political issues. Each State was selfish enough to have her roads of a gauge different from her neighbor, to prevent competition and give a break of bulk. This they thought would be the means of building up cities for themselves; but instead, it made the products of the manufacturers of the North cost too high to bring South and the productions of the South cost too much to get to the Northern market, on account of so much change and break of bulk, and every line of road charging its local rates. The results were not as expected. The roads were unprofitable, and the cities unprogressive.

Supply and demand unrestricted is the only thing that can regulate trade; and that must be done through the merchant and the public carrier, and the less it costs to carry, the better for both the producer and consumer.

THE MANUFACTURERS' RECORD, which has just entered upon its ninth volume, is a paper



NO. 23.

of which not only its proprietors may well be proud, but the city also and the South. Its success from a business point of view has been remarkable, and—an even better thing in many respects—it has by energy, enterprise and a close adherence to sound economic principles, made for itself a strongly established reputation and a position in the front rank of the best trade journals of the country; and that its efforts in behalf of Southern development have considerably benefited the growing industries of the South is scarcely to be doubted.—Baltimore American.

THE MANUFACTURERS' RECORD is an able and enterprising paper. The amount of information it gives on industrial matters is wonderful. A journal of this character must be a great help in the development and advancement of the Southern section of our country. There is every reason to believe that manufactures in the South will pay, and all that is necessary is to convince capitalists of this truth. With free labor, a genial climate and abundant resources, no better country can be found on earth.—Frederick (Md.) News.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.

Sellers' Double Axle Lathe.

We illustrate in this issue a double-headed axle lathe designed and manufactured by Messrs. William Sellers & Co., of Philadelphia, who inform us that during the year 1851 they sold the first lot of double axle lathes made by them. These lathes embodied many of the important features of the tool they now build, but differed in details of construction. For instance, they arranged the central driving head with a Clement's driver, carried on universal joints, so as to vibrate in any direction needed to accommodate itself to the inequalities of the rough axle, and to compel rotation without strain on the axle, other than torsion, and provided independent power feeds to each of the two slide rests.

Examples of the Sellers lathe of 1851 are still in use, but, as constructed, it failed to meet their expectations, so far as quantity of work was concerned; and it was found that their single axle lathe when improved to its present efficiency, though turning only one end at a time, was capable of doing as much work as the old double machine. During the 34 years intervening between the design of these lathes and the present time, they have turned their attention to perfecting the single lathe, adapting it to the requirements of the increased size of axles and to the turning of steel in the place of wrought iron. In perfecting the single lathe they claim to have so arranged the parts as to reduce to the minimum the time of handling the lathe and the time required to adjust the axle, apart from its actual work in cutting, demonstrating the great advantage of saving time between cuts in increasing the output of the tool. In the light of the present state of the art of axle turning, Wm. Sellers & Co. have now designed an axle

spindle, thus insuring a condition of absolute stability under rotation.

They introduce all the devices found so effective in the dead-heads in the slide-rests, and in the feed-motion of their regular axle lathe, adding to this machine a crane that does away with all objection that can be urged against the double lathe on the score of time lost in setting the axle. To a post behind the lathes, but attached to it near to the center of the length of the bed, is swung a horizontal jib carrying the hand-hoisting gear. This jib is suspended at some distance from the side of the vertical post, so that it will swing around it, and when directly over the lathe bed will be in line with and directly over the axis of the lathe. When it is at such an angle as will permit the swinging axle to pass the fixed poppet head, the axle can then be thrust through the spindle until its center coincides with the center of the driving spindle, and the axle is thus placed in centers without any other movement of the swinging jib. The center is reached, as stated above, by means of a

the adjustment of the tool and in the quick operation of all the hand movements are the same on this lathe as on their single lathe.

The double lathe takes up less space than two single lathes, and, as arranged for getting the work in, should yield better results in time than two single lathes run by the same workman, as the time of turning the same axle end for end is saved.

An independent stop motion is provided to each of the slide rests, so that if from neglect they are permitted to feed up to the center head the power feed will be thrown out, thus preventing damage. A tool shelf is placed near to the driving-head, where it is convenient for the workman to place his gauges and extra tools.

Ice Cream Freezers.

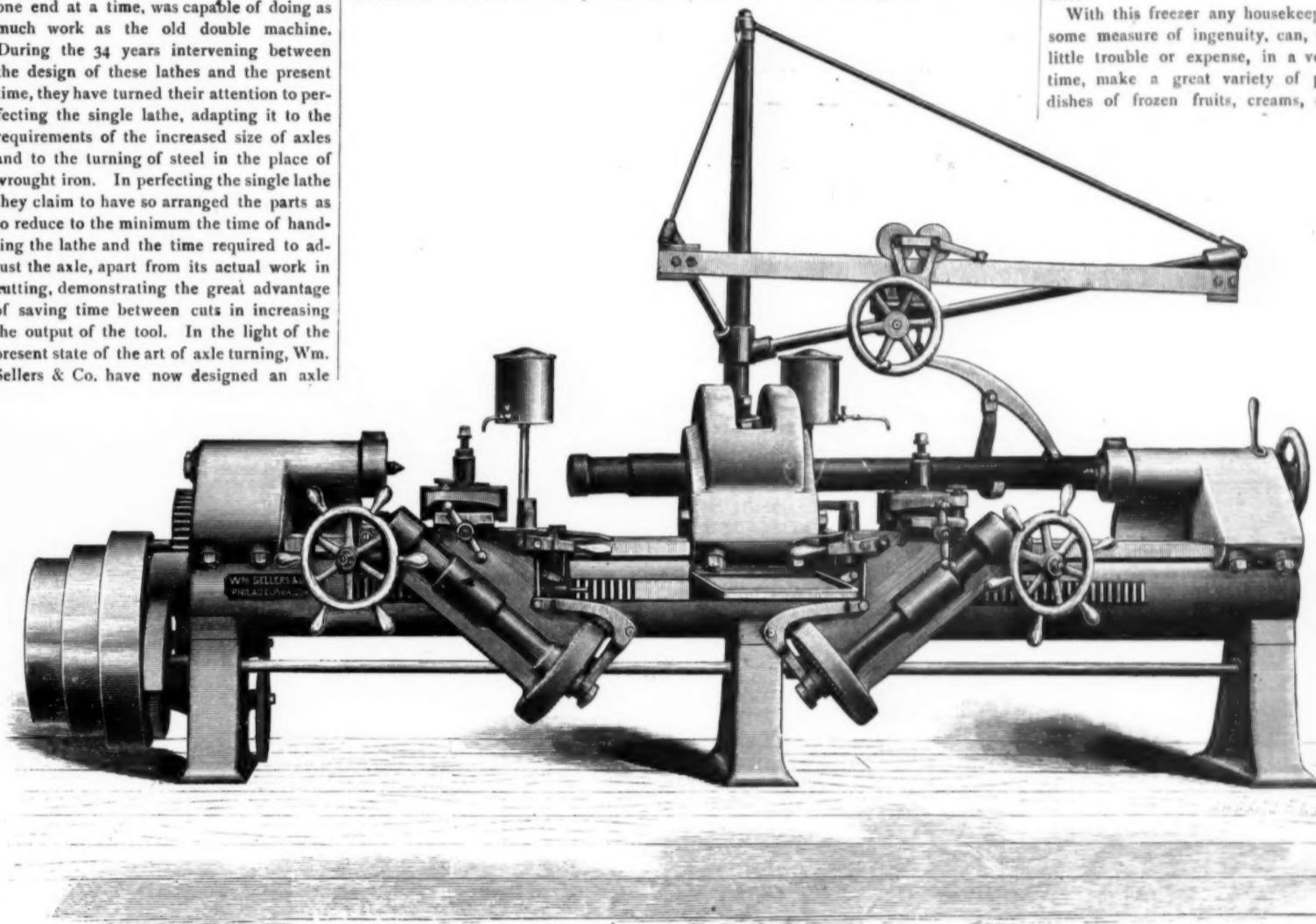
The "Peerless" Gooch Freezer does its work quickly, with little power. Besides its use for making ice cream and sherbets, it can be used for making all kinds of fruit

the center leaf works it into the cream, aerating it to agreeable lightness.

When the cream is all evenly frozen and mixed, the dasher can be removed, and the can may be revolved without it, until the cream is sufficiently solid. In this manner the hardening is rapidly done. The crank may be used at the top or side of the freezer, as preferred. These valuable characteristics are peculiar to the "Peerless" Gooch Freezer, and in them lie its claims to superiority.

Fruit ices are also peculiar to this freezer. When the cream is frozen and rubbed smooth, but before it hardens, remove the dasher, and put in strawberries, pine-apple, orange or other fruit, which mixes readily with the cream. Then set the can revolving without the dasher to thoroughly harden the mass. When wanted for the table, remove the cover, invert the can over a plate, and apply a cloth wet with hot water to the outside of the can, when the solid mass of cream is deposited on a plate, to be cut in slices.

With this freezer any housekeeper, with some measure of ingenuity, can, with but little trouble or expense, in a very short time, make a great variety of palatable dishes of frozen fruits, creams, custards,



SELLERS' DOUBLE AXLE LATHE.

lathe to turn both ends of the axle at the same time, in which tool they introduce the features prominent in their lathe 1851, but under the more favorable circumstances of having a larger and stiffer axle to work on than was the case in 1851, and in the introduction of improved methods of turning, combined with special contrivances to enable them to put the work in and out with greater despatch. Thus, while they use a driver in principle the same as that built by them in 1851, yet from having a new and better manner of placing the axle, they can make the opening in the spindle smaller for a larger axle, and obtain bearings not too large in diameter and of equal length on each side of the driver. They place the axle between the centers before the driver is attached, and then tighten up the driver through a gap in the middle of the driving head, thus taking hold of the center of the axle in the middle of the driving spindle, and the power to turn the spindle is also applied directly in the middle of the driving

peculiar hook combined with a strut that is as readily applied as a single hook, and while it catches the axle out of center far enough to clear the head, yet by means of an arm it carries the center of the axle directly under the center of the hoisting carriage. Axles placed behind the lathe bed and parallel with it can be taken by this crane, lifted to the right height very quickly, swung into place from the end to pass through the live-head spindle, and then brought into line of the centers; the axle taking its place as readily as if there was no driving machinery in the middle of the bed to complicate the problem of setting.

The improved method of getting the axle into the machine makes a vital difference between the tool and all others that have preceded it. This new lathe is capable of taking as heavy a cut on both ends of an axle at the same time as their single lathe will take on one. In other words, it has twice the driving power. The feeds are the same, and all the devices found so useful in

creams, frozen fruits, custards, jellies, blanc-mange, etc., greatly extending its use over an ordinary freezer, and increasing its usefulness in any family.

It has no complications beyond the capacity of a child. With one hand all its parts may be set in exact place, the cream frozen and removed.

The can sets squarely anywhere. The dasher is self-adjusting, and when placed in the can, goes directly to its center and rest, whether the can is filled with cream or not. The can and the dasher revolve in opposite directions, but the dasher turns with greater speed, and rapidly rubs the cream to perfect fineness. One arm of the dasher detaches the frozen cream from the sides of the can and whirls it to the center, while the other, following, spreads the liquid cream upon the sides of the can, alternately freezing and removing, which makes the work more rapid and cream even. The vacuum behind the detaching leaf, produced by its revolutions, draws the air to the bottom of the can, when

jellies, blanc-mange, etc., which have been heretofore only obtainable from city caterers. The "Giant" Gooch freezer, for confectioners and hotels, is a complete and strong machine. They have all the improvements of the "Peerless" freezer, and in addition are so heavy and strongly made as to scarcely ever require repairs. These freezers are made by the Gooch Freezer Co., Cincinnati, Ohio.

IT is self-evident that the industrial advance of the South during the last few years has been marvelous, and there is every indication that it is a thoroughly healthy and permanent growth. It is no sudden matter, but rather only the beginning of the wonderful advancement the South is about to make in adding to its own and the nation's wealth. A surplus of a full hundred millions this year will fit it for more than doubling that surplus next year, and the next decade will witness the South closely pressing the North in every channel availa-

ble for industry. The South will largely multiply its demand for iron and coal within the next few years, and furnish the iron and coal from its own mines and furnaces; and the day is close at hand when its cotton will be all spun and mainly woven by its water-power and its labor. And when furnaces and cotton mills dot the South wherever needed, every form of diversified industry will follow. It is fairly probable that the next decade will present a more prosperous industry in the South than in the North. There are many natural causes to contribute to that result, and the Southern people are now, for the first time, prepared to utilize their great advantages. This growth does not mean paralysis or decay in Northern industry, but that what the South can do better for itself than the North can do for it will be done by its own enterprise;

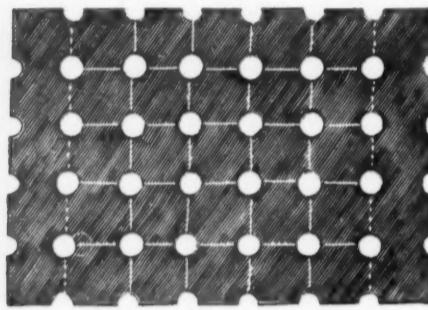


FIG. 1.

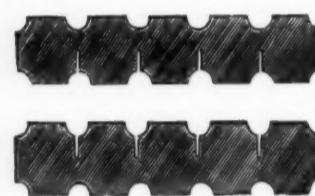


FIG. 2.

and the progressive people of the North will readily adapt themselves to the new order of things. The new wealth of the South will be largely diffused throughout the North, and Southern prosperity will mean the common prosperity of the whole country.—Iron, Philadelphia.

The Ripe Fruit Carrier.

Every practical grower and shipper of fruits as well as every commission merchant and retailer of them, has experienced the necessity of placing good fruits only in market, and in a more mature and better condition; and every consumer is interested in it. The Ripe Fruit Carrier, manufactured by Messrs. Jenkins, McGuire & Co., Baltimore, Md., is claimed to meet this necessity. The Ripe Fruit Carrier is made of pasteboard into perfectly ventilated cells, of sizes to suit the fruit, and all wrapping is dispensed with.

It may be crated as one may fancy, or with plank and common laths, into any size package to suit the shipper, but bushel crates are recommended, and rare and choice fruits may be put into light skeleton packages of a peck or half-peck before crating.

It is similar to the egg carrier, but it is ventilated and adjustable, and is said to carry ripe peaches, tomatoes, oranges, pears, delicate apples, Japanese persimmons, figs, etc., in perfection. All wrapping, drying-houses, sizing-machines, etc., are dispensed with. It classes the fruit, makes it uniform throughout the crate, and each specimen being in a house to itself with eight windows, is free from heating or rubbing, and so braced that a slatted crate in which the fillers are encased is strong and stable, even with lighter head-pieces than are used in ordinary packing.

Figure 1 represents the flat as it is to be packed for shipment to growers; the squares show where the fruit rests.

Figure 2 represents the cross pieces to be placed in the flat to form the cells.

Figure 3 represents an orange crate with one end unslatted, showing cover upturned. It contains eight fillers and two covers. The fillers are made with cells of any size, and fruit must fit tightly in cell.

The ventilating openings are so arranged that no specimen touches another or a rough surface; the fruit can't mash; its tendency is to dry from the time it enters the cells, and matured fruit only need be shipped.

The Alabama Coal Consolidation.

In our Birmingham letter will be found an account of the recent meeting of owners of lands in the Warrior coal field, held with a view to forming a combination for the purpose of preventing competition in the sale of land and keeping up prices.

The Montgomery (Ala.) Daily Advertiser has the following editorial on this subject:

The news from Birmingham is alarming to every man who values the safety and prosperity of Alabama. It is high time a signal were flung to the winds that the people may gaze on it and know beforehand the danger that confronts them. The commands of monopoly and the loud cry of the workingmen have reached us hitherto as the distant mutterings of a storm from whose fury we

represented were the most valuable in the Warrior field, and the rest concurred in that belief. The proposition was made to form a new corporation, and that all the lands represented be transferred to this new company. Capt. J. F. Johnston was the mover of the plan, and we quote from the Age the account of what he said:

"Mr. Johnston moved that a new corporation be formed, and the lands of the several companies represented be transferred to this new company. He thought a committee should be appointed to formulate a plan of operation, and fix the price of the lands. He regarded it as a measure of economy to consolidate all these lands, and, at the same time all competition would be broken down, either for buying or selling. Another advantage was that the lands could be solidified, and their value would be greatly enhanced by being in compact bodies."

In this Col. Ensley concurred, and so did many others, and the single solitary voice raised against this monstrous thing came from Montgomery. It was the voice of an ex-Mayor of this city, Mr. M. L. Moses "thought it would retard the development of the coal interests of the State." A voice crying in the wilderness! for what could one feeble protest contrive against the greedy advocates of monopoly, with appetites whetted by what they had fed on?

A committee was appointed to fix the relative value of the lands as a basis on which they were to be entered as part of the property of the corporation. This committee afterward met and readily agreed on these values.

The Age concludes its account as follows:

"If the consolidation is carried out it will make the largest coal combination in the world. It will practically monopolize all the productive coal lands in the Warrior coal field."

Should it ever be carried out, the day that sees it will hear the knell of industrial freedom in Alabama. A chain will have been forged for the free limbs of progress and the fetters we shall never break. Gigantic as this monopoly will be, the consolidation of 247,000 acres of coal lands will be but the starting point, a lusty infant stretching itself to fabulous growth. Besides it the coal and iron and steel monopolies of Pennsylvania will cower like modest violets in the shadow of a sunflower. It will have the field to itself. It will break down all opposition and absorb all rivals. The owners of small properties cannot afford to enter the markets against it and will be compelled to sell at the monopoly's own price. Owners of plants already in operation will be forced into it in self-defence. It will add acre after acre to its domain, and agency after agency will be brought in to subserve its power. So gigantic in its birth, what will it be in the full flush of its maturity?

We speak strongly in this matter because we feel deeply. Monopoly is insidious. It begins with smiles and fair promises, and the cry of "development" is its catch word to win the people till it can command them. This coal corporation would probably do some great things at first, in the building of new industries. It can put forward claims

to development and progress that will sound as sweetly to the ear of enterprise as church bells to the Christian. But 'twill end in a dozen kings and a million paupers.

Can anything be done to arrest this monopoly ere it be too late? At every spasm that has heralded its coming we, the people and the press, have thrown high our ready caps in the air. We have mistaken the symptoms of disease for landmarks of progress, and if this bold eruption shall come to head, all remedies and preventives will be but "might have beens."

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Common,	rate 4
Concord,	8½

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Superior Axle,	dis 60
Norway,	40
Saddle,	dis set \$1.50

FINISHED CLIP KING BOLTS.

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Flanged, 3 doz.	\$3.00

DASHES.

Leather,	dis 10
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ENAMELED CLOTHS.

Muslin, 3 yard,	5-4
Drill,	50 in.
Duck,	50 in.
Tan Back,	5-4.

FELLOE PLATES.

Per doz.	8
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FIFTH WHEELS.

Derby, 3/8, 3 doz.	\$7.75
" 3/4, " "	8.75
Cincinnati, 3/8, 3 doz.	6.00
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RUBBER DUCK AND DRILL.

—35% off list.	9
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Seat, 1 3/4 x 2 x 6, 3 pair.	90
Buggy, 1 3/4 in, and larger.	8
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WHEELS, SARVEN PATENT.

Oil-tempered springs 2c. advance from above.	"
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MALLEABLE CASTINGS.

Rate	8
Core,	12

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Per doz. pair.	\$2.25 @ 7.50
Spokes, No. 1, 1 to 1 1/2,	\$2.25 @ 15
" X, 1 to 1 1/2,	2.50 "
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Fancy Morocco, 3 ft.	85
Bow, 3 ft.	20 @ 23
Collar,	24
Harness, 3 ft.	40

HICKORY FELLOE.

X.....	1 1/4 1 1/4 1 1/4 1 1/4
XX.....	1 1/2 1 1/2 1 1/2 1 1/2

HICKORY SPOKES.

No. 1.....	1 1/4 1 1/4 1 1/4 1 1/4
2 1/2 2 1/2 2 1/2 2 1/2	2 1/2 2 1/2 2 1/2 2 1/2
XX.....	3 50 3 50 3 50 3 50

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XX.....	3 75

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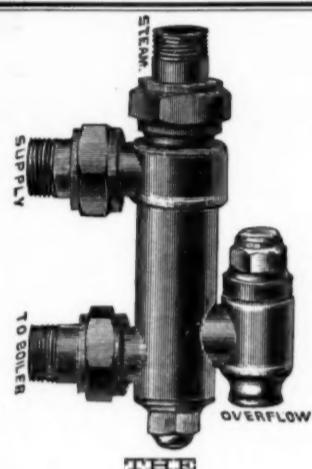
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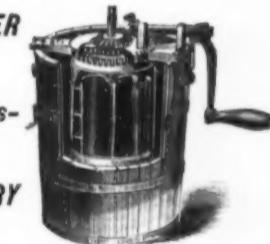
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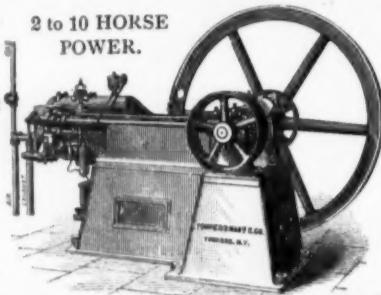
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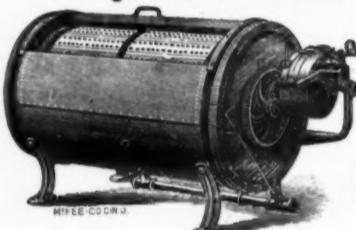
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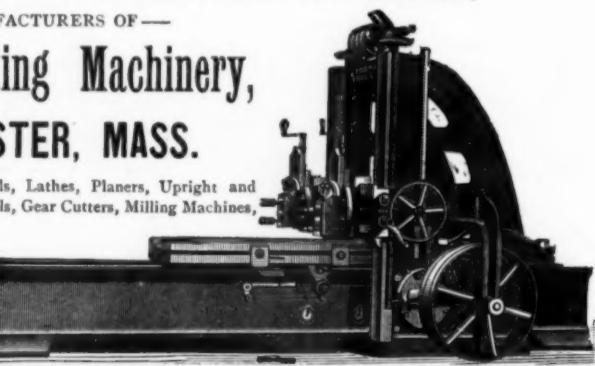
POUND MACHINE TOOL CO.

Successors to DAVID W. POND.

—MANUFACTURERS OF—

Iron Working Machinery, WORCESTER, MASS.

Special Railroad Tools, Lathes, Planers, Upright and Radial Drills, Boring Mills, Gear Cutters, Milling Machines, Patent shafting Lathes, Hand Punches and Shears, Planer Chucks, Special machinery in great variety. Estimates furnished. Send for catalogue.



Southwark Foundry and Machine Co.

430 WASHINGTON AVE., PHILADELPHIA, PA.

Porter-Allen and Southwark Engines, Blowing Engines, Gas Apparatus, Hydraulic Machinery.

GET THE BEST.



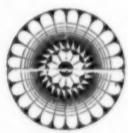
A Good Water Wheel Increases
the Value of Your
Whole Plant.

GET THE BEST AT FIRST AND AVOID THE
EXPENSE AND DELAY OF CHANGING
THE WHEELS.

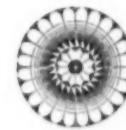
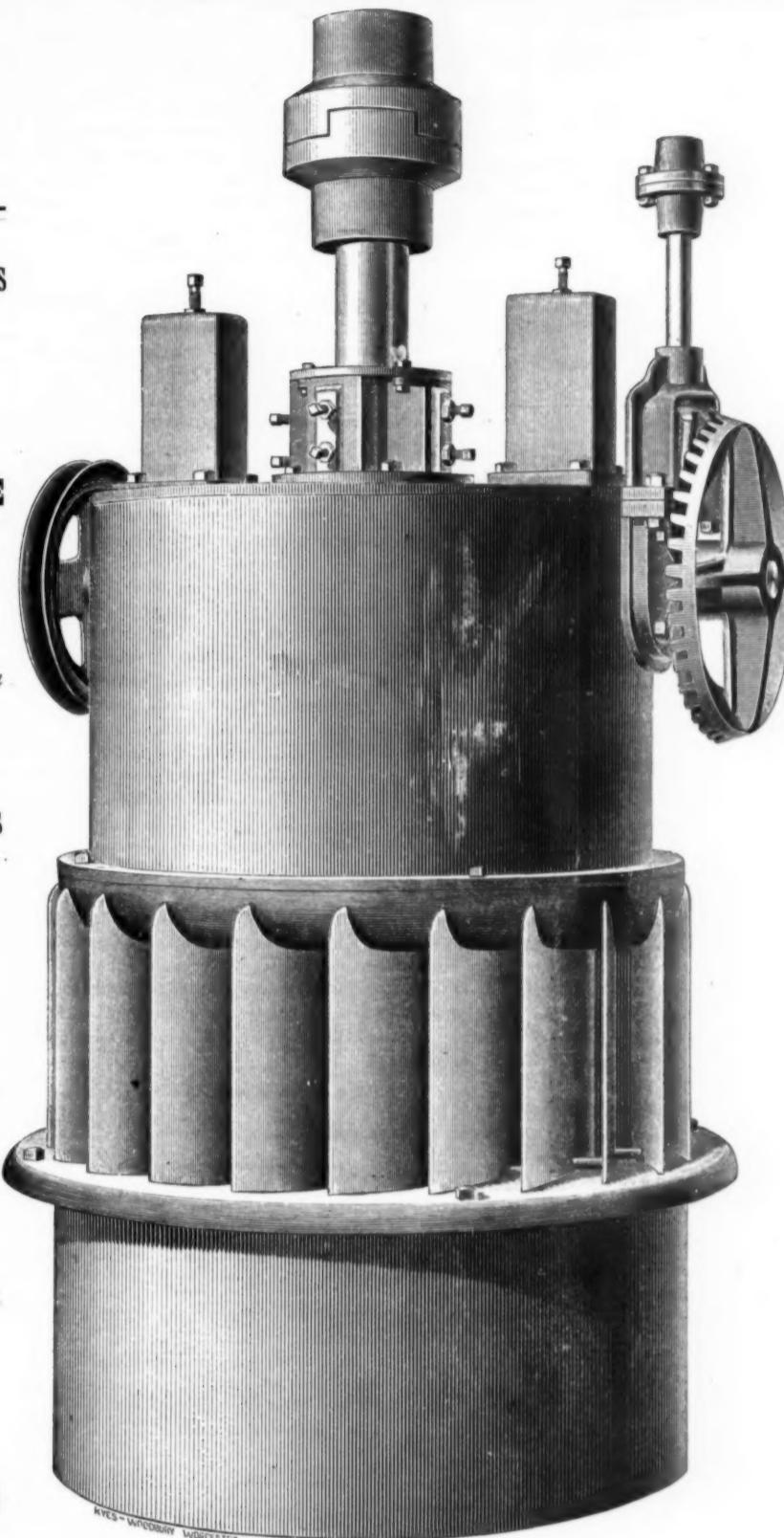
*A Good Wheel Will Serve You
Well for Twenty Years.*

THE BEST IS THE CHEAPEST. IT DOES
MORE WORK, LASTS LONGER, AND
COSTS NO MORE FOR GEARS
AND SETTING THAN A
COMMON WHEEL.

The Hercules Gives the Most Power for its Size
and the Highest Average Percentage
from Full to One-Half Gate of
any Wheel Ever Made.



Below we give the Names of the



When it is considered that the HOLYOKE WATER POWER COMPANY test every wheel that is put in in Holyoke, and use the wheels as a gauge or meter for measuring the water to the manufacturers and charge them for the actual quantity of water used, it will be seen that the HERCULES stands first in the estimation of Holyoke manufacturers as an economical wheel in the use of water for the amount of power produced. The HERCULES, we believe, is the only wheel of which all the sizes, both right and left hand, have been tested, some of them many times, and all brought to the standard of excellence which has been set by the makers and demanded by their customers.



Mills in Holyoke, Mass., using

THE HERCULES WATER WHEELS

THE HEAD OF WATER ON THE WHEELS AND THE POWER FURNISHED BY THE HOLYOKE WATER POWER CO.:

	Diam. in inches.	Head on Wheels.	Date of Power.	Setting.
Albion Paper Company.....	39	25	1878	
Albion Paper Company.....	24	25	1883	
Albion Paper Company.....	45	27	1880	
Albion Paper Company.....	30	27	1883	
Chemical Paper Company.....	4-30	23	1880	
Chemical Paper Company.....	5-18	23	1880	
Chemical Paper Company.....	33	23	1880	
Chemical Paper Company.....	42	23	1880	
Chemical Paper Company.....	2-48	23	1880	
Connecticut River Pulp Company....	36	18	1881	
Crocker Paper Company.....	39	25	1883	
Farr Alpaca Company.....	48	19	1878	
Franklin Paper Company.....	39	20	1883	
Geo. R. Dickinson Paper Company...	2-45	19	1883	

	Diam. in inches.	Head on Wheels.	Date of Power.	Setting.
Geo. R. Dickinson Paper Company...	36	19	1883	
Holyoke Water Power Company.....	30	19	1882	
Holyoke Warp Company.....	48	11	1879	
Massachusetts Screw Company.....	27	19	1882	
Merrick Thread Company.....	48	12	1880	
Newton Paper Company.....	48	21	1880	
Nonotuck Paper Company.....	48	20	1880	
Nonotuck Paper Company.....	27	29	1881	
Riverside Paper Company.....	48	20	1880	
Syms & Dudley Paper Company.....	45	29	1881	
Syms & Dudley Paper Company.....	24	29	1881	
Springfield Blanket Company.....	36	18	1877	
The Beebe & Holbrook Paper Co....	24	19	1884	

	Diam. in inches.	Head on Wheels.	Date of Power.	Setting.
The Massasoit Paper Company.....	39	19	1883	
Union Paper Company.....	45	20	1882	
Union Paper Company.....	30	20	1882	
Valley Paper Company.....	42	27	1882	
Wauregan Paper Company.....	42	18	1879	
Wauregan Paper Company.....	33	18	1882	
Whiting Paper Company.....	27	18	1882	
Whiting Paper Company.....	18	15	1880	
Winona Paper Company.....	48	28	1880	
Winona Paper Company.....	24	28	1880	

Increase since..... 9,797
Total 10,576

Send for
Catalogue
No. 3.

HOLYOKE MACHINE COMPANY, Worcester, Mass.

TRADE NOTES.

EVERY brick maker in the South should send to Fletcher & Thomas, Indianapolis, Ind., and get their handsomely illustrated catalogue and price-list of brick-yard supplies, brick machines, pug mills, etc., etc. This catalogue shows a new and improved process of manufacturing brick, and many valuable suggestions to brick makers. Mention this paper and get a copy; postage free.

THE lithographing establishment of Messrs. A. Hoen & Co., Baltimore, is among the foremost in the world. In the reproduction by the chromo-lithographic process of paintings in water colors they have been so successful as to have stood the test in London of competition with French and English works of a similar kind. As a result, they not long ago received an order from the London publisher of "The Garden," a monthly magazine devoted to horticultural subjects, for a series of plates of flowers to be reproduced from originals in water-colors, which were forwarded for that purpose. Some of the plates have been executed and forwarded to the publisher of "The Garden," who has expressed his entire approval of them. The plates already finished are as natural in coloring as they are good in drawing, and are fine specimens of the thoroughly artistic work that the Messrs. Hoen are capable of turning out from their establishment. One of the earliest evidences of the ability of the firm to make a perfect fac-simile of a painting was the reproduction in colors of a German picture, which was such an exact copy that when placed side by side with the original it was difficult to distinguish one from the other. This copy was exhibited at the Centennial Exposition, and was considered such a fine piece of work that a gold medal was sent to the Messrs. Hoen. The process is patented by Mr. A. Hoen.

The Gooch Freezer Co.

Hardware dealers and those using the celebrated Gooch Ice Cream Freezers will be pleased to learn that the Gooch Freezer Co., of Cincinnati, Ohio, have moved into their elegant new quarters, extending from 28 to 38 East 9th street, corner of Sycamore street, and are now prepared to fill orders more promptly.

Their business, owing to the excellence of their goods, has reached wonderful proportions, and they ship goods to nearly all civilized parts of the world. These freezers are all well made, never defective, and very popular wherever used. A great many are sold in the South, and they are often shipped in car-load lots.

THE Rice Sand Molding Machine, made by the Peerless Manufacturing Co., Louisville, Ky., has attracted much attention from manufacturers, and although works for its manufacture were opened only last fall, the increasing demand for these machines has compelled the manufacturers to greatly enlarge their capacity. They have just purchased the property formerly occupied by the Louisville Agricultural Works, 200x300 feet, with three story building, foundry and machinery, &c., all in working order. They will make the necessary changes and move at once. It is thought that the increased facilities will enable them to keep up with the increasing demands for their machines.

MR. JONATHAN CREAGER, builder of the Grand Automatic Brick Machines, Cincinnati, O., has recently made the following sales: A steam-power "Grand Automatic" Brick Machine to Stewart & Haines, Garden City, Kansas; 2 machines and pug mill to J. H. Egelhoff, Louisville, Ky.; a machine to Louisville Brick Co., Louisville, Ky., recently organized; a machine and pug mill (extra heavy) to N. Clark & Son, San Francisco, for making fine brick, every brick to be marked "Pacific."

THE Preble Machine Works Co., manufacturers of wood-working machinery, Chicago, state that trade is very good with them, and that indications are favorable for a heavy trade after the season opens.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, Feb. 17, 1886.

Business during the past week has not been specially active. The market continues firm, and prices remain as last quoted:

Bar Iron, 1 to 6x3 to 1....	lb. 1.85@ 2.10
" 1 to 4x3x1 to 1....	1.85@ 2.10
" 1 to 2, round and square....	1.85@ 2.10
Hoop Iron, 1½ wide and upward....	2½@ 2½c
Hand Iron, from 1½ to 6 in. wide....	2.30@ 2½c
Horseshoe Iron....	2½@ 2½c
Norway Nail Rods....	5@ 5½c
Black Diamond Cast Steel....	8@ 9 c
Machinery Steel....	3@ 5 c
Spring Steel....	3@ 5 c
Common Horse Nails....	10@ 14 c
Railroad Spikes, 5½x9-16....	2½@ 2½c
Horse Shoes, 3 kg....	3 70
Mule Shoes, "....	4 70
Steel Boiler Plate....	3½@ 3½c
Iron Boiler Plate....	2½@ 4 c
Boiler Tubes....	55 off list

There has been no change in the condition of the pig iron market since our last report, and we repeat quotations:

Baltimore Charcoal Wheel Iron (all Baltimore ore)....	\$25 00@26 00
Virginia C. B. Charcoal Wheel Iron....	25 00@26 00
Autrachite, No. 1....	18 00@19 00
" 2....	16 00@17 50
" 3....	15 00@16 00
Mottled and White....	13 00@14 00
Old Iron Rails....	21 00@22 00
No. 1 Wrought Scrap....	18 00@19 00
Old Car Wheels....	16 00@16 50

HARDWARE.

The hardware market is quiet but firm. Notwithstanding the severe weather of the past few weeks a fair amount of business was transacted, and the advances already made have been firmly held. The orders from the South are increasing as the season advances, and altogether a more hopeful feeling prevails. There is a very uneasy feeling among the manufacturers of padlocks, owing to the very low prices prevailing. An advance on these goods may be expected. There are no changes in price since our last issue.

The nail market is firm and demand good. The price has advanced to \$2.50@2.60.

Philadelphia Iron Market.

PHILADELPHIA February 16, 1886.

The nail makers are not counting upon such a prosperous year, owing to the course things are taking in the West. Western buyers will not be so dependent upon us, and it will be therefore necessary to guard against overproduction. At our last week's meeting it was reported that there was only about a month's stock on hand, and that all the conditions surrounding the trade were of a favorable character. Card rates \$2.50; bottom price \$2.40. Forge iron is scarce where good quality is considered. Quotations today are all the way from \$16 to \$17, with nothing of a desirable quality being offered on the market. There is a good deal of forge that is not standard. Foundry iron is fairly abundant, and good material has been selling all the week at \$17 for No. 2, and \$19 for No. 1, although a first-class foundry is not to be had under 50 cents more. The foundries are melting up a good deal of iron, and the makers are looking for better prices. Manufactured iron orders have been hanging back for no apparently good reason. Large orders can be had on reasonable terms. Small orders are coming in. The bridge builders have not been heard from yet, excepting in a small way. The ship yard people have been in the market making some small purchases, and arranging for a good deal more material. We look for a good demand from this quarter.

Plates and angles may be quoted at \$1.90; merchant bars, \$1.60 to \$1.85; steel nails \$2.40 to \$2.50. Steel rails \$34 to \$35. There is a great deal of talk of railroad

building, but much of it is poor pay, that is, the builders desire to pay for their rails in bonds, which rail makers will not accept. The wrought iron pipe makers have not been able to put up prices, but think that the demand that they see in sight will allow them to do so in the spring. The builders of our new steel works are getting ready as fast as possible to supply the market with an improved quality of mild steel, and they are entertaining great expectations, but competition is likely to assert itself, and keep prices down. Old rails are extremely scarce. We are depending upon foreign supplies, which are coming in very slowly.

Cincinnati Iron Market Report

Specially reported by ROGERS, BROWN & CO., Pig Iron Commission.

CINCINNATI, Feb. 15, 1886.

Sales of pig iron have been light in most Western markets this week. But there has been a fair inquiry, and matters appear to be shaping for liberal business a little further along. The sellers of iron find ample comfort in contemplation of the future. The mileage of new railroad now regarded as certain for 1886; the very extensive changes in gauge of Southern railroads to be made in the early summer, and consequent renewals of equipment and material; the large orders for cars now in sight beyond those already placed; the enormous prospective demand for cast and wrought pipe, and a fair prospect for general consumption in foundries and mills, all combine to hold producers firm and confident through the temporary lull in demand.

The coke furnace strike has resulted in no scarcity of iron yet, but eight furnaces are banked in the Mahoning valley, and others must stop soon. This sooner or later must be felt in the general market as it will take two weeks after the ovens resume to stock the furnaces sufficiently to begin blast. We make no change in quotations, which are held firm for cash f. o. b. cars at Cincinnati:

HOT-BLAST FOUNDRY.

Ohio and Southern Strong Coke No. 1....	\$18 00@18 50
" " " No. 2....	17 00@17 50
" " " No. 3....	16 50@17 50
" " " No. 4....	16 50@19 50
" " " Mottled and White....	17 50@18 00
Old Iron Rails....	21 00@22 00
No. 1 Wrought Scrap....	18 00@19 00
Old Car Wheels....	16 00@16 50

CHARCOAL IRON.

Hanging Rock, No. 1....	\$21 00@22 00
" " " No. 2....	20 00@21 00
Tennessee and Alabama, No. 1....	19 00@19 50
" " " No. 2....	18 00@18 50
FORGE.	

STRONG NEUTRAL COKE.

Strong Neutral Coke....	\$16 00@16 50
Mottled " "	14 50@15 00
Cold Short....	14 50@15 00

CAR WHEEL AND MALLEABLE.

Southern Car-Wheel Iron....	23 00@25 00
Hanging Rock C. B....	28 00@30 00
" W. B....	22 00@24 00
Lake Superior Malleable....	24 00@25 00

Specially reported by E. L. HARPER & CO.

CINCINNATI, February 15, 1886.

The market is firm, and the outlook grows more encouraging. All branches of manufacture seem to be increasing their capacity, and as spring comes it will undoubtedly bring with it an increased volume of business. The labor troubles still continue in the coke district, hence coke irons are becoming scarcer every day, as this class of iron is used more largely than any other. Silver grey irons are in good demand, as are also strong foundry irons, and prices are well sustained. Quote prices same as last week:

FOUNDRY.	Cash.
Hanging Rock Charcoal, No. 1....	\$19 50@20 00
" " " " " 2....	18 50@19 00
Southern Charcoal....	18 50@19 50
" " " " " 2....	17 50@18 50
Strong Neutral Coke....	17 50@18 00
" " " " " 2....	17 00@17 50
American Scotch....	17 50@18 00

GRAY FORGE.

Neutral Coke....	15 00@15 50
Cold Short....	14 50@15 00

CAR WHEEL AND MALLEABLE.

Hanging Rock, strictly cold blast....	25 00@26 00
Hanging Rock, strictly warm blast....	21 00@21 50
" Cranberry," N. Carolina Warm Blast....	22 00@22 75
Amherst and Virginia Warm Blast....	21 50@22 00
Lake Superior Charcoal, all grades....	23 00@24 00

List of Patents

The following Patents were granted to citizens of the Southern States, bearing date Feb. 9, 1886. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Anderson, Lee, Paris, Texas. Hame-lock....335,985

Balantine, J. C., Thornton, Texas. Car-coupling....335,875

Bien, H. M., Vicksburg, Miss. Automatic fan for furniture....335,883

Brown, Perry, Louisville, Ky. Freight-car door....335,959

Brown, Perry, Louisville, Ky. Lock....334,990

Clifton, J. H., Weston, W. Va. Fire-escape....335,866

Conway, Jesse, Baltimore, Md. Nut-lock....336,037

Cooke, G. E., Clarksville, Tenn. Riving-machine....335,795

Dugard, D. H., Cedartown, Ga. Cut-off valve....335,993

Glass, D. W., Baltimore, Md. Copying-book, or the like....335,916

Holmgren, J. H., San Antonio, Tex. Press....335,816

Holt, R. B., and I. N. Walton, Allensville, Ky. Device for converting reciprocating into rotary motion....335,702

Jacobs, Samuel, Baltimore, Md. Car-wheel....336,050

Jenkins, W. M., Redding, Miss. Bale-tie....335,932

Jollippe, W. H., Baltimore, Md. Combined awning and blind....336,009

Kock, E. A., Waterloo, La. Cutting-share for plows....335,936

Lanier, T. W., Guyton, Ga. Self-cooler and strainer for syrup and sugar....335,706

Lovin, W. M., Greenville, Tex. Seeder....335,709

Lucas, Robert, and W. Dooton, Athens, Ga. Churn....336,012

Lucky, G. E., Paris, Tenn. Pea-thresher....336,012

McNeal, A. C., Geigersville, Ky. Automatic circuit-closer for telegraph-keys....335,605

Melcher, J. C., O'Quinn, Tex. Honey-extractor....335,848

Mitchell, John, Louisville, Ky. Steam-boiler attachment....335,947

Morgan, J. E., Columbus, N. C., and T. C. Morgan, Kinderhook, Ark. Seed-planter and fertilizer-distributor....335,830

Patterson, J. W., Madisonville, Ky. Vehicle-spring....335,953

Ratcliff, J. W., Lewisville, Tex. Seed-planter....335,959

Rice, K. F., Eureka Springs, Ark. Bustle....335,625

Sears, J. N., Galloway Station, Ark. Attachment for shingle-machines, for edging shingles....335,635

Simmons, J. W. L., Baltimore, Md. Propeller wheel....335,640

Slocum, J. L., Edwards, Miss. Cotton-scraper....335,973

Sullivan, T. J., Bowling Green, Ky. Treating smoke economically....335,658

Thompson, M. E., Barton, Fla. Plotter for drafting....335,853

Vestal, A. F., and C. A. Savoy, Tex. Holder for shades and reflectors....335,788

Webb, J. T., Courtney, Tex. Cane-mill....335,863

Williams, J. W., and I. H. Eddy, Louisville, Ky. Wash-board....335,868

Williams, J. W., and I. H. Eddy, Louisville, Ky. Wash board....335,868

Wolfe, H. R., Louisville, Ky. Circular-saw mill....335,73

Louisville Iron Market.

Specially reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.

LOUISVILLE, KY., Feb. 15, 1886.

Trade has not been of large volume for the past week; at the same time, it cannot be said to present any discouraging features. The ice which has been in our streets since the early part of January has not quite disappeared, nor has navigation upon the Ohio been fully resumed.

Bar iron is firm and buyers seem satisfied with the price. There is no large amount of it being contracted for, as is natural after a decided advance.

Sheet Iron.—There has been a marked advance in heavy sheet of some \$3 to \$4 above the lowest point reached. Light sheets being out of season, have not been affected to any great extent so far, and we are promised better prices in the spring.

Nails are just holding their own at prices which have been current for the past thirty days. The resumption of the steel works prevents any fears of scarcity.

Wire is held with extreme firmness by the manufacturers, and they all promise an advance early in March.

Nuts and washers seem to have advanced some \$3 or \$4 per ton, and a great deal of hardware from 5 to 10 per cent. We quote:

Bar Iron.....	1 80	@ 1 90
Crescent Steel.....	10	@ 1 12
Plow Steel slabs.....	2 50	@ 2 60
No. 27 Sheet.....	3 00	@ 3 20
Galvanized sheet, best.....	50	@ 55 $\frac{1}{2}$
Galvanized lowa barb wire.....	4 75	@ 5 00
Burden Shoes.....	4 00	@ 4 10
Juniata Shoes.....	3 70	@ 3 75
Carriage Bolts.....	75 $\frac{1}{2}$ to 10 $\frac{1}{2}$	
Steel nails.....	2 65	@ 2 75
Iron Nails.....	2 50	@ 2 60
Rope, Sisal.....	8	@ 8 $\frac{1}{2}$
Rope, Manilla.....	12 $\frac{1}{2}$ @ 13	
Screws, American Screw Co's list.....	75	@ 80 $\frac{1}{2}$
Axes.....	6 50	@ 6 75
Cross cut saws, wide, per foot.....	26	@ 38cts.
Cross cut saws, narrow, per foot.....	21	@ 23cts.
With concessions to large or wholesale buyers.		

Chattanooga Iron Market.

Specially reported by LOWE & TUCKER, Brokers and Commission.

CHATTANOOGA, TENN., Feb. 15, 1886.

The weather for the past week has been very unfavorable for general business purposes. Disagreeable cold rains have prevailed, which has had a tendency to check all lines of trade as well as the farming interests.

There is no particular change worthy of note in pig iron further than to state that the feeling, in reference to prices, is firm, and unless a more favorable turn should be manifested in the coke interests of Pennsylvania a general stiffening up of prices will take place.

Our manufacturing interests are well in hand, with plenty of orders. We continue quotations of the leading articles:

No. 1 Foundry.....	\$15 50	@ 16 50
No. 2 Foundry.....	14 50	@ 16 00
American Scotch.....	14 50	@ 15 50
Gray Forge.....	13 00	@ 14 00
Car-Wheel Iron.....	23 00	@ 25 00
Ores, Red and Brown.....	1 50	@ 2 25
Furnace Coke.....	2 00	@ 2 30
Nails, car-load lots, 30 days.....	—	@ —
Bar Iron, per 100 lb.....	—	@ 1 65
Old Rails.....	—	@ 18 50
Old Wheels.....	—	@ 14 50
Wrought Scrap, No. 1.....	—	@ 6 00
" No. 2.....	—	@ 5 00
Cotton Tie Clippings.....	—	@ —
Cast Scrap.....	—	@ —
Railroad Splices.....	—	@ 1 75
Railroad spikes.....	—	@ 2 00
Light Steel Rails, long ton.....	—	@ —
Barb wire—Cambria link.....	—	@ —
Barbed wire—four point galvanized.....	—	@ —
Barb ware.....	—	@ —

St. Louis Iron Market.

Specially reported by ROGERS, BROWN & Co., Gay Building, 204 N. 3rd street, St. Louis, W. H. SHELTON, Manager.

ST. LOUIS, Feb. 15, 1886.

Owing to the coke strike in the Connellsburg district, as well as the eight hour agitation, the market is somewhat irregular. There is considerable inquiry for iron for delivery within the next three or four months at opening of navigation. We quote:

HOT-BLAST CHARCOAL.	
Missouri.....	\$17 50 @ 18 50
Southern.....	18 50 @ 19 50
Ohio.....	— 60 —
COKE AND COAL.	
Missouri.....	17 50 @ 18 50
Southern.....	17 50 @ 19 00
American Scotch.....	18 00 @ 21 00
MILL IRONS.	
Missouri.....	16 00 @ 17 00
Southern.....	15 00 @ 16 50
CAR-WHEEL AND MALLEABLE IRON.	
Southern.....	22 00 @ 25 00
Lake Superior.....	22 00 @ 24 00
MISCELLANEOUS.	
Old Wheels.....	16 00 @ 17 00
Old Rails.....	21 50 @ 22 00
Connellsburg Coke, East St. Louis.....	5 30 @ —
In a, par.	

Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save \$3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms, \$1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city.

T. M. Parker, Steel Stamps, Stencils, Hartford, Ct.

AGENTS WANTED**In Every Town**

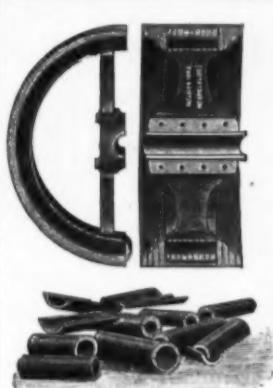
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SOUTH**To Solicit Subscriptions**

FOR THE

Manufacturers'**Record.****References Required.**

Managers of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

**Wood Split Pulleys.****MILBURN
Gin & Machine Co.**

MEMPHIS, TENN., U. S. A.

MANUFACTURERS OF

STEAM ENGINES, BOILERS,

(Made by the Tweedle system of hydraulic riveting).

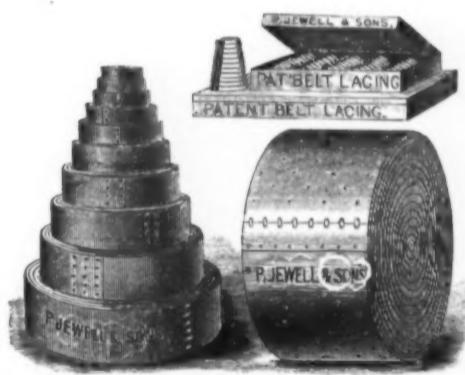
Cotton Gins, Gin Feeders and Condensers,**And the Celebrated "INDEPENDENCE" Wood Split Pulley, with Bushing System.**

The best and lightest Pulley made. Every one guaranteed. Send for catalogue, testimonials and price-lists. We have the largest works of the kind in the world. Will send one of our Wood Split Pulleys to any responsible party, for thirty days' trial, free of charge, if it fails to meet our warranty.

**Milburn Gin & Machine Co.****JEWELL BELTING CO.**

SUCCESSORS TO

P. JEWELL & SONS.



— MANUFACTURERS OF —

LEATHER BELTING

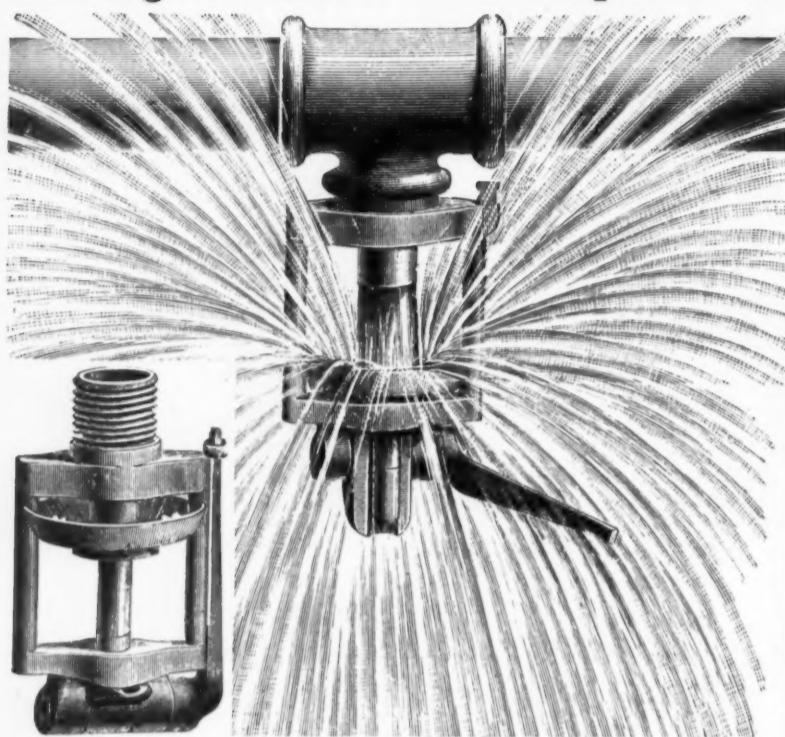
— AND —

LACE LEATHER,

HARTFORD, CONN.

WALWORTH

Strong Sensitive Link Sprinkler.



THE WALWORTH STRONG SENSITIVE LINK SPRINKLER, for the extinguishment of fires, having for its most salient points

STRENGTH, SIMPLICITY AND RELIABILITY.
has forced its way to the front solely because it has been proved to be the best Sprinkler made. No Sprinkler ever introduced has shown such good results. In no instance has it failed to act when needed, notwithstanding the fact that it has been ever tested in many instances.

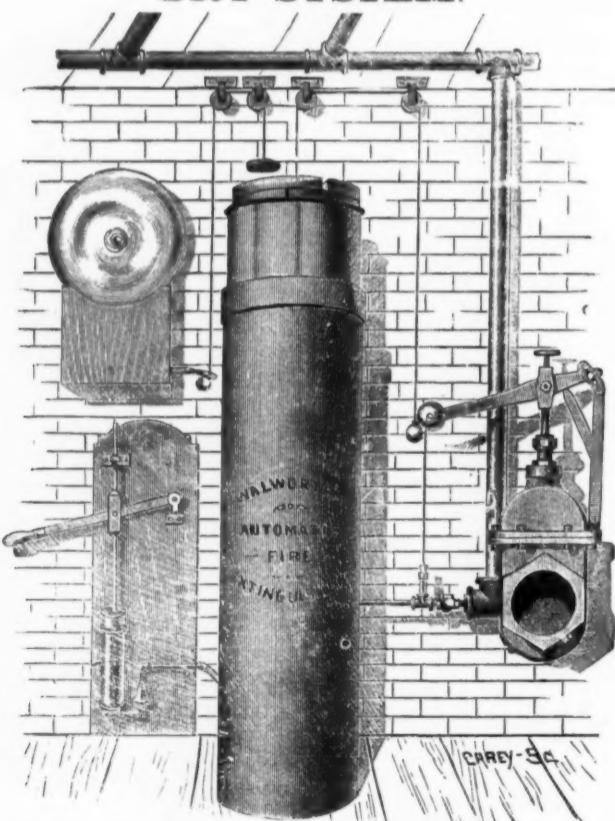
We give below the account of a remarkable fire:

MESSRS. WALWORTH MANUFACTURING CO.:

GENTLEMEN—On Sunday evening fire was discovered in our engine room, and in five minutes had worked its way through a belt box to the fourth floor. For a few minutes it looked as if the place must go, but the automatic heads on each floor near the fire went off and quickly extinguished it without assistance from hose or anything else. Had there been sprinklers in the engine room, fire could not have got beyond it, and we will be pleased to have you put them in this room at your earliest convenience. After the fire was out we shut the water off at tanks, put on new rings at the eleven heads which had gone off, and with water on started in full next morning as though nothing unusual had taken place.

WALWORTH Automatic FIRE Extinguisher.

DRY SYSTEM.



By this system the pipes are filled with compressed air under a pressure of one pound to the square inch. Attached to the pipes is an Airometer, the inner tank having a weight upon it of 100 pounds. This tank and weight is raised by the compressed air, and as soon as a Sprinkler is opened the pressure, being released, allows the tank and weight to fall, thus opening a valve and either starting the pump or releasing the water from tank or street mains. It is so arranged that an alarm will sound just before the valve is to be opened, notifying that there is a fire, or that more air must be pumped. The entire supply of air can be produced by a few strokes of the air pump. Manufactured by the

Walworth Manufacturing Co.
No. 16 Oliver Street, BOSTON.

PAINTS, OILS, &c.

PAINTS.

Black Lamp, coach painters.....	3 lb 4@6c
Black Lamp, ordinary.....	3 lb 4@6c
Black Ivory Drop, fair.....	12@15c
Black Ivory Drop, best.....	30c
Black Paint, in oil.kegs, 6c; assorted cans, 9c	
Blue Prussian, fair to best.....	30@40c
Blue Prussian, fair to best, in oil.....	35@40c
Blue Chinese, dry.....	70c
Blue Ultramarine.....	12@25c
Brown, Spanish.....	1c
Brown, Van Dycke.....	5@15c
Green, chrome, in oil.....	9@12@15c
Green, Paris.....	good, 2c; best, 25c
Green, Paris, in oil.....	good, 2c; best, 25c
Iron Paint, bright red.....	3 lb 25c
Iron Paint, brown.....	3 lb 15c
Iron Paint, purple.....	3 lb 3c
Iron Paint, ground in oil, bright red.....	3 lb 5c
Iron Paint, ground in oil, red.....	3 lb 5c
Iron Paint, ground in oil, brown.....	3 lb 45c
Iron Paint, ground in oil, purple.....	3 lb 6c
Linseed Oil, raw.....	44c
Single Boiled.....	46c
Double ".....	48c
Mineral Paints.....	2@4c
Orange Mineral.....	2c
Red Lead, American.....	6@7c
Red Venetian, (English) dry.....	31.50 to 31.75
Red Venetian, in oil.....	assorted cans, 6c; kegs, 6c
Red Indian, dry.....	8@12c
Rose Pink.....	10@18c
Sienna, American, raw.....	4c
Sienna, Burnt.....	8@15c
Sienna, burnt, in oil.....	8@15c
Sienna, raw.....	8@15c
Umber, burnt.....	4@8c
Umber, burnt, in oil.....	8@12c
Umber, raw.....	3@7@12c
Umber, raw, in oil.....	8@14c
Vermilion, Chinese.....	90c
Vermilion, English.....	6@6c
Vermilion, American.....	15@18c
White Lead, American, pure dry.....	7c
White Lead, American, pure in oil.....	6@7c
White, Paris, English, prime.....	in brls. 1@2c
Yellow Ochr, French.....	1.75
Yellow Ochr, French, in oil, ass'd cans, 6c; kegs, 6c	
Yellow Ochr, American.....	in brls. 1@2c
Yellow Chrome.....	6@18c
Yellow Chrome, in oil.....	9@12@15c
Zinc White, American, No. 1, dry.....	6@7c
Zinc White, American, No. 1, in oil.....	6@7c
Zinc White, French dry.....	6@12c
Zinc White, French in oil.....	10@14c

OILS.

Bleached W. Sperm oil.....	100@10c
Nat. " " "	95@10c
B. W. Elephant oil.....	75@—
" " Whale oil.....	60@ 6c
Prime Lard oil.....	53@ 55
Extra No. 1 Lard oil.....	50@—
Lubricating oils.....	12@ 25
Miners' oil.....	43@ 50
W. Pressed Fish oil.....	30@ 32
Neatsfoot oil.....	55@ 75
Steam-refined Cylinder oil.....	40@ 55
Best Filtered " ".....	65@—
Signal oil.....	55@—
Paraffine.....	12@ 20

SUNDRIES.

Benzine.....	3 gal. 8@10c
Turpentine.....	3 gal. 30c
Chalk.....	3@c
Chalk, block.....	3@c
Dryer patent Am'n.....	ass'td cans, 8c; keg, 7c
Frostings.....	40c
Glue, white.....	18@36c
Glue, sheet.....	14@20c
Glue, ordinary.....	8@12
Glaziers' Points, zinc.....	8c
Gum, Copal.....	36c
Gum, Damar.....	35c

►METALS.►

TIN PLATES.

BLOCK TIN.

"Lamb and Flag," and "Straits."

Large Pigs.....	23
Small Pigs.....	24
Bars.....	26

TINNERS' SOLDER.

No. 1 Refined.....	13
Marker Half-and-Half.....	14
Strictly Half-and-Half.....	14@25

ROOFING PLATS.

IC, 14x20, Choice Charcoal Terne.....	5 50
IX, 14x20, " " ".....	7 00
IC, 20x28, " " ".....	13 00
IX, 20x28, " " ".....	14 00
IC, 20x28, Extra fine quality, charcoal roofing, genuine "old style" redipped.....	14 00
IX, 20x28, " " ".....	18 00

COKE PLATES.

C, 10x14, bright, "B. V." grade.....	5 00
C, 14x20, " " ".....	6 50
X, 14x20, Gutter.....	7 50
C, 10x20, " " ".....	8 50

SHEET ZINC.

In casks of 600 lbs., 3 lb.	5 1/2
In smaller quantities, 3 lb.	6 1/2

TIN PLATES.

IC, 10x14, Charcoal.....	5 50
IX, 10x14, " " ".....	7 50
IC, 12x12, " " ".....	5 70
IC, 14x20, " " ".....	5 70
IX, 14x20, " " ".....	7 50
IX, 14x20, " " ".....	9 50
IX, 14x20, " " ".....	11 50
IX, 14x20, " " ".....	13 50
IX, 20x28, " " ".....	18 00
DC, 100, Plate " ".....	5 50
DX, 100, " " ".....	7 50
DX, 100, " " ".....	9 55
DX, 100, " " ".....	9 55

BABBITT METAL.

No. 1 Ordinary.....	15
Antimony.....	9
Excelsior Babbitt Metal, No. 2.....	18
" " " " ".....	20
" " " " ".....	9

LEAD.

Pig.....	5 1/2
Bar, (15 oz. bars).....	6 1/2
Sheet.....	7
Pipe, full coils.....	7

COPPER.

Tinned Sheathing, 14x8, 14, 16, 18 oz.....	20
" " " Planish'd, 14x8, 14, 16 oz.....	32
" " " Boilers 7, 8, 9.....	35
Copper Pit Bottoms.....	22
Tinning Extra.....	15
Brazier's Copper, 15 to 100 lb.....	20
" " " 10 to 12 lb.....	22
" " " 8 lb.....	24
" " " 6 lb.....	32
Bolt ".....	20
Tinning extra.....	40

BRASS.

ROLL AND SHEET BRASS.

Brown & Sharpe's Gauge the Standard.
New List, Jan. 17, 1884.
Dls 30&30 5%

COMMON HIGH BRASS.

Wider than $\frac{1}{2}$ in. and including $\frac{1}{2}$ in. 10 12 14 16 18 20

To No. 20, inclusive. .21 .22 .23 .25 .27 .29

Nos. 21, 22, 23 and 24. .22 .23 .24 .26 .28 .30

Nos. 25 and 26. .22 1/2 .23 1/2 .24 1/2 .26 1/2 .28 .30

Nos. 27 and 28. .23 .24 .25 .28 .30 .32

Add 9 cts. $\frac{1}{2}$ lb. for sheets cut to particular widths and lengths.

Add $\frac{1}{2}$ c. $\frac{1}{2}$ lb. additional on each number thinner than Nos. 28 to 38 inclusive.

Brass thinner than No. 38 is Platers' Brass.

at

55 cts.

Printers' rules.....

45 cts.

Printers' Sheets and Plates cut to particular sizes and lengths to No. 20, inclusive.....

30 cts.

Brazing, Spinning and Spring Brass, one cent more than common High Brass.

Low Brass four cts. $\frac{1}{2}$ lb. more than common High Brass.

Gilding, Oreide and Bronze seven cts. $\frac{1}{2}$ lb. more than common High Brass.

SLITTING METAL.

Add to list as follows:

Over $\frac{1}{2}$ in. to 1 in., inclusive, Nos. 12 to 20,

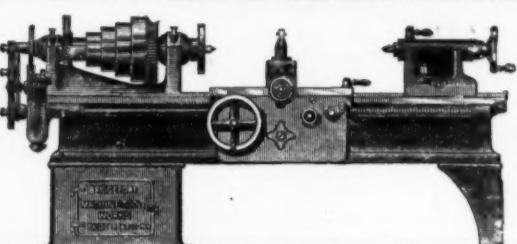
inclusive.....

1/2 c.

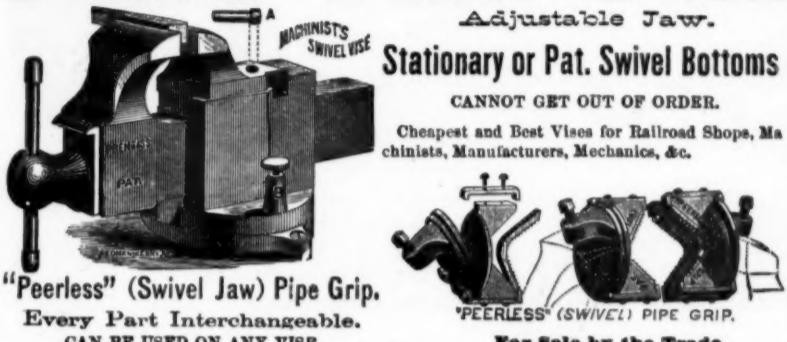
Over $\frac{1}{2$

E. P. BULLARD,

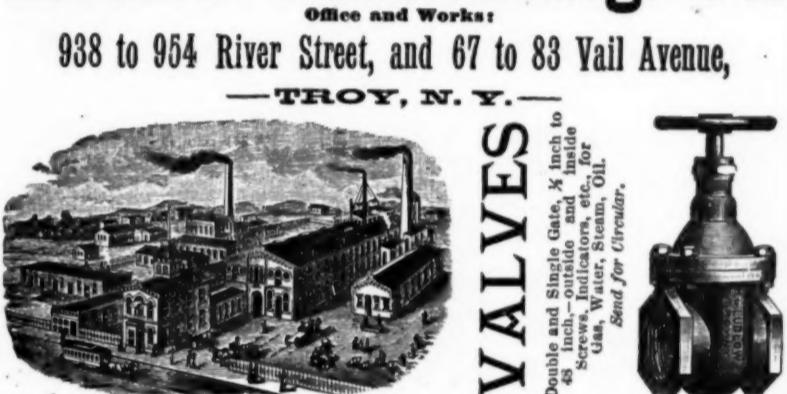
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Fitted with speed adjuster, Sawyer's Lever and
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Belvidere Iron Co., 52 Broadway, N. Y.
Sea Island Chemical Co., Beaufort, S. C.

**"STEAM"**

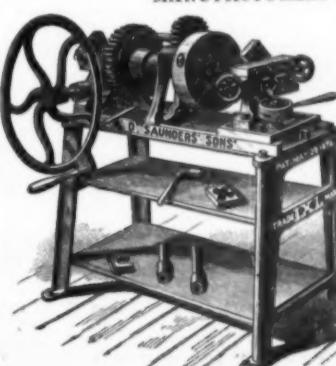
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Baltimore WHOLESALE Prices.

Eagle and Vulcan	ANVILS.	10 lb. 10 c. dis 20%
Wright		94 c
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AUGERS AND BITS.		
Conn. Valley Mfg. Co.		dis 60¢ & 10¢ &
Douglas Mfg. Co.		7 1/2¢ from list of
Ives		Jan. 7, 1880
Cook's Douglass Mfg. Co.		dis 60¢ & 10¢
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Patent Solid Head		dis 25¢
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Expansive Bits, Clark's small		\$18; large, 26. dis 25¢
Expansive Bits, Ives'		\$20 @ 30, dis 33 1/2¢
Expansive Bits, Blake's		\$20, dis 40¢
Hollow Augers, Ives'		dis 25¢
Hollow Augers, Douglass'		dis 25¢ & 10¢
Hol. Aug., Bonney's Adjust.		dis 24¢, dis 25¢ & 10¢
Hol. Aug., Ives' Expansive, each		\$4.50, dis 30¢ & 10¢
Hol. Aug., Universal Expansive, each		\$4.50, dis 20¢
Wood's		dis 25¢
Gimlet Bits		\$7.50 per gross, dis 50¢
Gimlet Bits, Diamond		per doz \$1.25, dis 40¢
Double Cut Gimlet Bits, Shepherdson's		dis 40¢
Double Cut Gimlet Bits, Douglass'		dis 33 1/2¢
Double Cut Gimlet Bits, Ives'		dis 50¢
Morse's Bit Stock Drill		dis 25¢
L'Hommedieu's Ship Augers		dis 15¢
AWL HAPTS.		
Sewing Brass Ferrule		\$3.50 per gross—dis 40¢ & 10¢
Patent Sewing, Short		\$11 per gross—dis 40¢ & 10¢
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AWLS, BRAD SKTS, &c.		
Awls, Sewing, Common		75¢ to \$1
Awls, Shouldered Peg		75¢ to \$1
Awls, Patent Peg		90¢ to \$1.50
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Awls, Handled Brad		\$7 per gross—dis 25¢ & 10¢
Brad Sets, Aiken's		\$10.50 per doz. \$12—dis 45¢ & 10¢
Brad Sets, No. 42, \$10.50; No. 43, \$12.50—dis 70¢		
Brad Sets, Stanley's EXC. No. 1, \$6.60, dis 30¢ & 10¢		
Brad Sets, Stanley's EXC. No. 2, \$4.80, dis 30¢ & 10¢		
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AXLES.		
Collins & Co.		\$7.25; beveled—\$7.75
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Single Bit, 4 1/2 to 5 1/2 and under		per doz. \$6.50 net
Single Bit, 4 1/2 to 6 and over		per doz. \$7.00 net
Single Bit, beveled		50¢. doz. advance
Double Bit, 4 1/2 to 5 1/2 and under		per doz. \$13.00 net
Double Bit, 4 1/2 to 6 and over		per doz. \$13.50 net
Double Bit, beveled		\$1.00 per doz. advance
Second quality Axes		50 cts. less than above
AXLES.		
Sheldon & Co., iron		.55¢ off
" " " steel		.55¢ off
AXLE GREASE—Frazer's		1 lb. 6c.
BALANCES.		
Spring Balances		dis 40¢ & 10¢
BELLS.		
Hand, White Brass		dis 75¢ & 10¢
Hand, White Metal		dis 60¢ &
Hand, Silver Chime		dis 10¢ & 10¢
Hand, Globe (Cone's Patent)		dis 25¢ & 10¢
Gong, Abbe's		dis 20¢ & 10¢
Gong, Yankee		dis 30¢ & 10¢
Gong, Barton's		dis 30¢ & 10¢
Leon Reading		dis 25¢ & 10¢
Pull, Brook's		dis 50¢ & 10¢
Crank, Taylor's		dis 25¢ & 10¢
Lever, Sargent's		dis 55¢ & 10¢
Bloomfield		dis 20¢
Lever, R. & E. M. Co's		dis 45¢ & 10¢
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" 100 lb \$10 \$2.50 \$7 \$4 \$3.50 \$4.50 \$5		
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Van Sand's Old Pattern		1 1/2, 2 1/2, 3 1/2, 4 1/2, 5 1/2, 6 1/2, 7 1/2, 8 1/2, 9 1/2, 10 1/2, 11 1/2, 12 1/2, 13 1/2, 14 1/2, 15 1/2, 16 1/2, 17 1/2, 18 1/2, 19 1/2, 20 1/2, 21 1/2, 22 1/2, 23 1/2, 24 1/2, 25 1/2, 26 1/2, 27 1/2, 28 1/2, 29 1/2, 30 1/2, 31 1/2, 32 1/2, 33 1/2, 34 1/2, 35 1/2, 36 1/2, 37 1/2, 38 1/2, 39 1/2, 40 1/2, 41 1/2, 42 1/2, 43 1/2, 44 1/2, 45 1/2, 46 1/2, 47 1/2, 48 1/2, 49 1/2, 50 1/2, 51 1/2, 52 1/2, 53 1/2, 54 1/2, 55 1/2, 56 1/2, 57 1/2, 58 1/2, 59 1/2, 60 1/2, 61 1/2, 62 1/2, 63 1/2, 64 1/2, 65 1/2, 66 1/2, 67 1/2, 68 1/2, 69 1/2, 70 1/2, 71 1/2, 72 1/2, 73 1/2, 74 1/2, 75 1/2, 76 1/2, 77 1/2, 78 1/2, 79 1/2, 80 1/2, 81 1/2, 82 1/2, 83 1/2, 84 1/2, 85 1/2, 86 1/2, 87 1/2, 88 1/2, 89 1/2, 90 1/2, 91 1/2, 92 1/2, 93 1/2, 94 1/2, 95 1/2, 96 1/2, 97 1/2, 98 1/2, 99 1/2, 100 1/2, 101 1/2, 102 1/2, 103 1/2, 104 1/2, 105 1/2, 106 1/2, 107 1/2, 108 1/2, 109 1/2, 110 1/2, 111 1/2, 112 1/2, 113 1/2, 114 1/2, 115 1/2, 116 1/2, 117 1/2, 118 1/2, 119 1/2, 120 1/2, 121 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1/2, 788 1/2, 789 1/2, 790 1/2, 791 1/2, 792 1/2, 793 1/2, 794 1/2, 795 1/2, 796 1/2, 797 1/2, 798 1/2, 799 1/2, 800 1/2, 801 1/2, 802 1/2, 803 1/2, 804 1/2, 805 1/2, 806 1/2, 807 1/2, 808 1/2, 809 1/2, 810 1/2, 811 1/2, 812 1/2, 813 1/2, 814 1/2, 815 1/2, 816 1/2, 817 1/2, 818 1/2, 819 1/2, 820 1/2, 821 1/2, 822 1/2, 823 1/2, 824 1/2, 825 1/2, 826 1/2, 827 1/2, 828 1/2, 829 1/2, 830 1/2, 831 1/2, 832 1/2, 833 1/2, 834 1/2, 835 1/2, 836 1/2, 837 1/2, 838 1/2, 839 1/2, 840 1/2, 841 1/2, 842 1/2, 843 1/2, 844 1/2, 845 1/2, 846 1/2, 847 1/2, 848 1/2, 849 1/2, 850 1/2, 851 1/2, 852 1/2, 853 1/2, 854 1/2, 855 1/2, 856 1/2, 857 1/2, 858 1/2, 859 1/2, 860 1/2, 861 1/2, 862 1/2, 863 1/2, 864 1/2, 865 1/2, 866 1/2, 867 1/2, 868 1/2, 869 1/2, 870 1/2, 871 1/2, 872 1/2, 873 1/2, 874 1/2, 875 1/2, 876 1/2, 877 1/2, 878 1/2, 879 1/2, 880 1/2, 881 1/2, 882 1/2, 883 1/2, 884 1/2, 885 1/2, 886 1/2, 887 1/2, 888 1/2, 889 1/2, 890 1/2, 891 1/2, 892 1/2, 893 1/2, 894 1/2, 895 1/2, 896 1/2, 897 1/2, 898 1/2, 899 1/2, 900 1/2, 901 1/2, 902 1/2, 903 1/2, 904 1/2, 905 1/2, 906 1/2, 907 1/2, 908 1/2, 909 1/2, 910 1/2, 911 1/2, 912 1/2, 913 1/2, 914 1/2, 915 1/2, 916 1/2, 917 1/2, 918 1/2, 919 1/2, 920 1/2, 921 1/2, 922 1/2, 923 1/2, 924 1/2, 925 1/2, 926 1/2, 927 1/2, 928 1/2, 929 1/2, 930 1/2, 931 1/2, 932 1/2, 933 1/2, 934 1/2, 935 1/2, 936 1/2, 937 1/2, 938 1/2, 939 1/2, 940 1/2, 941 1/2, 942 1/2, 943 1/2, 944 1/2, 945 1/2, 946 1/2, 947 1/2, 948 1/2, 949 1/2, 950 1/2, 951 1/2, 952 1/2, 953 1/2, 954 1/2, 955 1/2, 956 1/2, 957 1/2, 958 1/2, 959 1/2, 960 1/2, 961 1/2, 962 1/2, 963 1/2, 964 1/2, 965 1/2, 966 1/2, 967 1/2, 968 1/2, 969 1/2, 970 1/2, 971 1/2, 972 1/2, 973 1/2, 974 1/2, 975 1/2, 976 1/2, 977 1/2, 978 1/2, 979 1/2, 980 1/2, 981 1/2, 982 1/2, 983 1/2, 984 1/2, 985 1/2, 986 1/2, 987 1/2, 988 1/2, 989 1/2, 990 1/2, 991 1/2, 992 1/2, 993 1/2, 994 1/2, 995 1/2, 996 1/2, 997 1/2, 998 1/2, 999 1/2, 1000 1/2, 1001 1/2, 1002 1/2, 1003 1/2, 1004 1/2, 1005 1/2, 1006 1/2, 1007 1/2, 1008 1/2, 1009 1/2, 1010 1/2, 1011 1/2, 1012 1/2, 1013 1/2, 1014 1/2, 1015 1/2, 1016 1/2, 1017 1/2, 1018 1/2, 1019 1/2, 1020 1/2, 1021 1/2, 1022 1/2, 1023 1/2, 1024 1/2, 1025 1/2, 1026 1/2, 1027 1/2, 1028 1/2, 1029

COOPERS TOOLS.		dis 15@20 \$	dis 5 \$
Bartons.....		dis 15@20 \$	
CROW BARS.		10 lb 4c	
IRON, Steel Points.		10 lb 3c	
CURLING IRONS, SC.			
16, 56, 3/4 in., \$1.20, 2.00, 2.50.		dis 10 \$	
Curling Tongs.		dis 10 \$	
Pinching Irons.		dis 10 \$	
CURRY COMBS.			
Fitch's new list.		dis 10 \$	
Hotchkiss, Novelty, new list, July, 1880.		dis 25 \$	
Hotchkiss, Excelsior Superior Champion.		dis 25 \$	
Lawrence, "Perfect".		dis 25@10 \$	
Rubber.		dis 10 \$	
Sweet & Clarke.		dis 10 \$	
Lusters.		dis 25 \$	
CURTAIN PINS.			
Silvered Glass.		net	
White Enamel.		net	
CUTLERY.			
Association (Table).		net	
Naugatuck Cutlery Co.		list net	
Excelsior Knife Co.		net	
Wilson's Butcher and Shoe Knives.		dis 30 \$	
Ames' Shoe Knives.		dis 15 \$	
Wm. Rogers Mfg. Co., Plated Cutlery.		dis 10 \$	
DOG COLLARS.			
Embossed Gilt.		dis 20 \$	
Leather.		dis 25 \$	
Brass.		dis 25 \$	
DOOR SPRINGS.			
Torrey's Rod, regular size, 20 doz, 23.		dis 40@10 \$	
Gem (Coil):			
No. 1, Large Jappanned.		dis \$4.00	
No. 2, Medium Jappanned.		dis 2.75	dis 40 \$
No. 3, Small Jappanned.		dis 2.00	
No. 4, ("Shoo Fly") Screen door size, 1.50			
No. 5, Screen door size.		dis 2.00	
No. 6, Medium.		dis 1.75	
No. 7, Large.		4.00	
Standard—10 doz \$1.25, 9 doz \$1.75.		dis 60@10 \$	
8 doz 2.50, 6 doz \$3.50.		dis 60@10 \$	
Hercules.		dis 50@10 \$	
DRAWING KNIVES.			
Ohio Tool Co.		dis 60@10 \$	
Crossman's No. 1.		dis 65&5/10	
Nobles Mfg. Co.		dis 15 \$	
Bradley's.		dis 35 \$	
Adjustable Handle.		dis 25 \$	
P. S. & W.		dis 20@10 \$	
Douglass.		dis 75@10 \$	
DRILLS AND DRILL STOCKS.			
Blacksmiths' Self-Feeding.		each, \$2.50, dis 10 \$	
Breast, P. S. & W.		each, 7.50, dis 10 \$	
Breast, Millers'.		dis 10 \$	
Breast, Millers Falls.		each, \$3.00, dis 15 \$	
Breast, Bartholomew's.		each, \$2.50, dis 25@10 \$	
Wilson's Drill Stocks.		dis 10 \$	
Automatic Boring Tools.		each, \$2.25, dis 10 \$	
EGG BEATERS.			
Dover.		dis 20 \$	
Blacksmiths' Self-Feeding.		dis 2.50, dis 2 \$	
Medallion.		gross, \$10.00	
Victoria.		gross, \$10.00	
EMERY AND EMERY PAPER.			
Regular numbers.		10 lb 6c	
Flour and F. F.		10 lb 4c	
B. & A. Emery Paper.		dis 30@5 \$	
ENAMELED AND TINNED WARE.			
Kettles.		dis 60@10@10 \$	
Sauce Pans.		dis 45 \$	
Tinned Sauce Pans.		dis 45 \$	
Escutcheon Pins—Brass.		dis 50 \$	
ESCUTCHEONS.			
Door Lock.		Same discounts as Door Locks	
Brass Thread.		dis 25 \$	
Wood.		dis 25 \$	
FAUCETS.			
Fenn's.		dis 40 \$	
Fenn's Cork Stop.		dis 33% \$	
Star.		dis 55@10	
Frary's Patent Petroleum.		dis 10@10	
West's Patent Key.		dis 45 \$	
Anchor Lock.		dis 45 \$	
Metallic Key, Leather Lined.		dis 60 \$	
Cork Lined.		dis 70 \$	
J. Sommer's Best Metallic Key.		dis 40 \$	
J. Sommer's Cork Lined, 1st quality.		dis 50 \$	
FILETS.			
E. M. Boynton's.		new list, dis 25 \$	
Western File Co.		dis 45 \$	
Butcher's.		\$4.50 to 5	
Moss & Gamble.		\$4.50 to 5	
H. Diaston & Sons (new list).		dis 40 \$	
Heller Bros.' Horse Rasp.		dis 20@5 \$	
Nicholson.		dis 60@10	
New American.		dis 50@10	
Union File Co.		dis 45 \$	
Stubs, new list.		dis 50 \$	
FLUTING MACHINES.			
Knox, 1/4-inch Rolls.		dis 30@5 \$	
Knox, 6-inch Rolls.		dis 44@10 \$	
Knox, 8-inch.		\$6.50	
Eagle, 3/4-inch Roll.		dis 15, 25 \$	
Eagle, 5/4-inch Roll.		2.85, dis 25 \$	
Crown, 5/4-in., \$3.50; 6, \$4.00; 8, \$6.50 each.		dis 35 \$	
Crown Jewell.		6-in., \$3.40 each.	
American, 5/4-in.; 6-in., \$3.40; 7-in., \$4.50 each.		dis 35 \$	
Domestic Fluter.		\$1.50 each, net	
Geneva Hand Fluter, White Metal.		10 doz \$15, dis 25 \$	
Crown Hand Fluter, Nos. 1, \$15; 2, \$18;		3, \$10.50; 4, \$8.25	dis 10 \$
Combined Fluter and Sad Iron.		dis 15 \$	
FORKS.			
Lawson & Brenizer.		dis 60 \$	
Remington.		dis 50@10 \$	
Sheble & Fisher.		dis 50@10 \$	
FISH FANS.			
Burnished list as follows.		dis 60@10@10 \$	
No. 1 2 3 4 5 6 7 8		dis 10 \$	
No. 10.		dis 3.75 4.25 4.70 5.25 6.00 7.00 8.00 9.00	
GAUGES.			
Marking, Stanley's.		dis 50@10@10 \$	
Marking, Chapin's.		dis 55@10@10 \$	
Wire.		dis 10@10 \$	
Wire, Diston's.		dis 20 \$	
Wire, Wheeler, Madden & Co.		dis 10 \$	
GIMLETTS.			
Nail and Spike.		dis 40 \$	
"Eureka" Gimlets.		dis 40 \$	
"Diamond" Gimlets.		dis 50 \$	
Double Cut, Shepardson's.		dis 50 \$	
Double Cut, Hartwell's.		dis 50 \$	
Double Cut, Iver.		dis 50 \$	
Double Cut, Douglass.		dis 33% \$	
"Reel".		dis 25 \$	
GLUE POTS.			
Tinned and Enamelled.		dis 40 \$	
Family, Howe's "Eureka".		dis 40 \$	
Family, L. F. & C. "Handy".		dis 30 \$	
GRINDSTONE FIXTURES.			
Sargent's Patent.		dis 10@10 \$	
Reading Hardware Co.		dis 25@10 \$	
GUN WADS.			
Eley's B. E. wads, 11 upwards.		\$1.75	
" " " 9 and 10.		2.00	
" " " 7 " 8.		2.25	
" P. E. " 11 upwards.		2.00	
" " " 9 and 10.		3.65	
" " " 7 " 8.		4.45	
HAMMERS.			
Maypole's.		dis 15 \$	
Harford Hammer Co.		dis 15 \$	
Mag'n Tack, Nos. 1, 2, 3, 1.50, 1.75, dis 10@10 \$			
WARNER & NOBLE'S.		dis 5 \$	
Kip's or Selvor's.		dis 30 \$	
Yerkes & Plum.		dis 15 \$	
HANDLES—Door or Thumb Latches.			
Nos. 0 1 2 3 4			
Pedo. 10@10 \$ 1.15 1.35 1.50.		dis 35@10 \$	
Roggins' Latches.		dis 35@10 \$	
Bronze Iron Drop Latches.		dis 30@10 \$	
Jap'd Store Door Handles—Nuts, 5¢; Plates, 10¢.			
Barn Door.		dis 10 \$	
Wrought Chest.		dis 65@10 \$	
Surface Chest.		dis 55@10 \$	
Flush Chest.		dis 55@10 \$	
Lifting.		dis 50@10 \$	
Saw and Plane.		dis 50@10 \$	
Lippincott Cross-Cut Saw.		dis 50@10 \$	
Hammer and Hatchet.		dis 50@10 \$	
Brad Awl.		gross, \$3.00, dis 50@10 \$	
Chisel, all kinds.		dis 50@10 \$	
Auger, assorted.		gross, \$4.50	
Auger, large.		gross, \$5.00	
Patent Auger, Iver.		dis 25 \$	
Patent Auger, Douglass.		dis 25 \$	
Patent Auger, Swan's.		dis 1.00 net	
HAMMOCK CHAIRS.			
White Mountain, per dor.		\$36.00	
" " " Finished in red, per dor.		\$49.00	
HANGERS.			
Cronk Hanger Co.—			
No. 4, per dor, plain.		\$12.00, 30@10 \$	
" " " " " " " " "		14.40, 50@10 \$	
" " " " " " " " "		18.00, 50@10 \$	
Iron clad track.		9 cents per foot, 50@10 \$	
Barn door stays.		\$3.00 per dor, 50@10 \$	
Barn Door, old patterns.			
Barn Door, New England.		dis 10@10 \$	
Climax (Anti-Friction).		dis 50 \$	
Warner's.		dis 10 \$	
Richard's.		dis 10 \$	
HATCHETS.			
Underhill's.		35 \$	
Haines' Solid Steel.		30 \$	
Shilling, Nos. 1 to 3.		dis 25@10 \$	
Claw, Nos. 1 to 3.		dis 25@10 \$	
Lathing, Nos. 1 to 3.		dis 25@10 \$	
Hammond's new list.		dis 45 \$	
Blood's.		dis 35 \$	
Hunt's.		dis 30 \$	
Russel's, low list.		dis 40	
Cohoe Bench Broad Adzes.		40	
HAY KNIVES.			
Gem.		dis \$13.50	
"Lightning".		dis \$20.00 net 5 \$	
Wadsworth's.		dis 30 \$	
HINGES.			
Plate Hinges { 8, 10@12 in.		31¢. 10 lb.	
" " " " " " " " "		31¢. 10 lb.	
" " " " " " " " "		31¢. 10 lb.	
" " " " " " " " "		31¢. 10 lb.	
Screw Hook { over 12 in.		31¢. 10 lb.	
" " " " " " " " "		31¢. 10 lb.	
" " " " " " " " "		31¢. 10 lb.	
Crown spring E-ges, for screen doors, dis 60 \$; for solid doors, double action, dis 45 \$; for solid doors, single action, dis 45 \$; for solid doors, double action, dis 55 \$.			
Crown Screen Door Latch.		gross, \$25, dis 55 \$	
Crown Christmas-Tree Holders, 2-in.		10¢. 10 lb.	
Bickford Portable Pump.		each, \$6.	
American Cake Mixer, No. 6.		each, \$3.50, dis 50 \$	
American Tobacco Cutter.		dis 25 \$	
A. M. Co. Clothes Wringer, 10@10 \$.		rolls, 10@10 \$, \$37.50; No. 3/4 rolls, \$48.	
Heavy Welded Hook.		dis 10@10 \$ in. \$7.50 \$10 10@10 \$; dis 14@10 \$ in. & 10@10 \$, \$6.50 \$10 10@10 \$; dis 16@10 \$ in. & 10@10 \$, \$5.50 \$10 10@10 \$.	
Planter.		60@10@5 \$	
Riveted Shank.		dis \$5.00, dis 50@10 \$ 5 \$	
Socket.			
Grub.			
Hick's Pat. Solid C. S. Planters.		dis 50 \$	
Hick's Pat. Solid C. S. Scovill Pattern.		dis 50 \$	
Hubbard, Bakewell & Co.		dis 60 \$	
HORSE NAILS.			
Ausable: Nos. 5 6 7 8 9 10			
Plain, 10 lb.		30¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢	
Finish'd, 10 lb.		31¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢	
Clint'n, P.M.		32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢ 32¢	
Clint'n, Fin'd.		34¢ 34¢ 34¢ 34¢ 34¢ 34¢ 34¢ 34¢ 34¢ 34¢	
" " " " " " " " "		35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢ 35¢	
Bridgewater.		38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢	
New Haven.		38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢	
Capewell.		38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢ 38¢	
HORSE SHOES.			
Burden.		1 kg \$3.70	
R. I. Horse Shoe Co., Perkins' Improved.			

Door Mineral.	SASH LOCK.	SHEAVES.
Door Por. Jap'd.	Same discounts as Door Locks.	Sliding Door, M. W. & Co., List.
Door Por. Plated.		Sliding Door, R. & E. list.
Door Por.		Sliding Door, Patent Roller.
Furniture Plain.	75c gross inch, dis 10%	Sliding Door, Pt. Roller, Hatfield's.
Furniture, Wood Screws.	dis 50&10%	Sliding Door, Russell's Anti-Friction.
Picture.	dis 50&10%	Also see Hangers.
Hemacite, Picture.	dis 35%	
Shutter, Porcelain.	dis 50&10%	
LADIES.		
Melting & Skim'g, Monroe's Pat.	dis 40	SHOVELS AND SPADES.
Melting, C & C.	dis 30&10%	Ames, New List, July 1, 1881.
LAWN MOWERS.		Griffiths.
Acme Buckeye, Easy & Excelsior, new list.	dis 40&10%	Remington's (Lowman's Patent).
LINES.		Rowland's.
Linen Fish.	dis 25&10%	Kimballs.
Wire Clothes, Galvanized, 100 feet.	dis 30	Lippincott, new list.
LOCK AND LATCHES.		Hussey, Bins & Co.
Cabinet, Eagle.	Changes made in list price.	
Cabinet, Gaylord.	{ of some numbers Jan. 1.	SPOKE TRIMMERS.
Cabinet, Bridgeport.	1881, dis 25&2%	Bonney's.
Cabinet, P. & F. Corbin.	dis 40%	Stearns'.
Trunk, new list, Jan. 1, 1881.	dis 15&2%	Ives'.
Yale Lock Co., Flat Key.	dis 40&2%	Douglas'.
Plate.	dis 33&2%	SILVER PLATED WARE.
DOOR LOCKS, ETC.		Wm. Rogers Manf. Co.
Bradford.		Holmes, Booth & Hayden.
Norwalk.		Brown Bros.
Norwich.	List prices as revised	Wallace's Steel Silver Plated.
P. & F. Corbin.	Dec. 10th, 60% for	Rogers Bros 1847.
Russell & Erwin.	cash.	C. Rogers & Bro.
Mallory, Wheeler & Co.		SILVER PLATED HOLLOW WARE.
Nimick & Brittan Mfg. Co.	dis 50&2%	Wm. Rogers Manf. Co.
Padlocks—Russell & Erwin.		Meriden Britannia Co.
Mallory, Wheeler & Co.	dis 70%	SOLDERING IRONS AND COPPERS.
Norwich Lock Manf. Co.	and 5% for cash.	Cover's Adjustable Irons.
Wm. Wilcox & Co.		Cover's Adjustable Coppers.
Nimick & Brittan Mfg. Co.	dis 33&2%	BRITANNIA.
Wm. Wilcox & Co.'s Plate Locks.	dis 33&2%	Tinned, Iron, Table and Tea.
Yale Lock Manf. Co.'s "Standard".	dis 40&2%	Tinned Iron Basting.
Romer's.	dis 25&40%	German Silver.
Conestoga.	dis 80 & 10%	STONE.
Scandinavian, "Norwich".	dis 50&10%	Hindostan No. 1, 5c; Axe, 8c.
Nimick & Brittan's Burglar-Proof Locks.	dis 50&2%	Sand Stone.
MALLETS.		No. 1, 10c, 16c, net.
Penfield Block Co., Apple, Hickory and		Washita Stone.
Lignumvitae.	dis 30	No. 1, 10c, 16c, net.
MAT CUTTERS.		Arkansas.
Dixon's (P. S. & W.) Nos. 1 2 3 4.	dis 10	SQUARES.
" 11 12 13 14.	dis 10	Steel.
Perry's, Nos. 1 2 3 4 4 5 6 5 6 7.	dis 30	Iron.
" 11 12 13 14 15.	dis 30	full cases, dis 60&10&10%
Woodruff's (P. S. & W.) Nos. 100 150.	dis 10	Iron.
" 15 16 17 18 19 20.	dis 10	full cases, dis 60&10&10%
Hules' Nos. 11 12 13.	dis 35	Iron.
" 21 22 23 24 25.	dis 35	cash.
Kieser's No. 55.	dis 40	Nickel Plated.
Kieser's Gem.	dis 25	Iron.
Kieser's No. 82.	dis 25	Tire Square and T Bevels.
Kieser's Monarch.	dis 45	dis 30&10%
Beaver Shaver, (Enterprise Manf. Co.)	dis 25	TACKS, BRAIDS, AC.
MOLASSES GATES.		[Less 10&2% for cash if paid by 6th of month following sale.]
Stebbins Patterns.	dis 70&10%	American Iron Carpet Tacks, all kinds.
Stebbins Genuine.	dis 67&10%	Steel Carpet Tacks, all kinds.
Stebbins Tinned Ends.	dis 40&10%	Swedes Iron Carpet Tacks, all kinds.
Chase's Hard Metal.	dis 50&10%	Swedes Iron Tacks.
Self-Measuring, (Enterprise).	dis 20	Swedes Iron Upholsterers' Tacks.
Lincoln's Pattern.	dis 60&10%	Tinned Swedes Iron Tacks.
Weed's.	dis 15	Tinned Swedes Iron Upholsterers' Tacks.
Boss Nos. 1 2 3 4.	dis 10	American Iron Cut Tacks.
" 5 6 7 8 9 10.	dis 10	Gimp and Lace Tacks.
Boss, Japanned Finish.	dis 60&10&10%	Leathered Carpet Tacks.
Bronze Finish.	dis 50&10&10%	Brush Tacks.
NUTS AND WASHERS.		TAP BORERS.
Square Nuts.	8 c off list.	Common and Ring.
Hexagon Nuts.	8 1/2 c off list.	Ives' Tap Bore.
Washers.	7 1/2 c off list.	Enterprise Mfg. Co.
OILERS.		TOBACCO CUTTERS.
Zinc and Tin.	dis 60&10%	Wood Bottom.
Brass and Copper.	dis 50%	All Iron.
Malleable (Hammer's).	dis 50	Wilson's.
PINKING IRONS.		THERMOMETERS.
Per dozen.	75 cts. net.	Tin Case.
PLAETING MACHINES.		Storm Glasses.
Astor Plaiting Machine.	each \$15, dis 20%	Winsted.
Crown Plaiting Machines.	dis 25%	TOE CALKS.
" 6 in, \$20; 10 in, \$30 each.		Game, Newhouse.
PLANAS AND PLANAS IRONS.		Game, Oneida Pattern.
Bench, First Quality.	dis 20%	Game, Blake's Patent.
Bench, Second Quality.	dis 25	Mouse, Wood, Choker.
Molding.	dis 15	" holes, 16c
Bailey's (Stanley R. & L. Co.) New list, Jan. 1879.	dis 20&10%	Mouse, Round Wire.
The Stanley (S. R. & L. Co.) new list, January 1879.	dis 20&10%	Mouse, Cage, Wire.
Bailey's.	dis 20&10%	Cyclon Mouse.
Plane Irons, Butcher's.	dis 50 to L.	" Ideal Mouse.
Plane Irons, Auburn Tool Co.	dis 20	Boss.
Plane Iron, Ohio Tool Co.	dis 20	" Rat, "Decoy".
Plane Iron, Sandusky Tool Co.	dis 20	" Delusion Mouse, per doz.
FLIERS AND NIPPERS.		TROWELS.
Button's Patent.	dis 33&2%	Lothrop's Brick and Plastering.
Hall's Pat. Compound Lever Cutting Nippers, No. 2, 5 in. \$13.50; No. 4, 7 in. \$21.00, dis 25%.	dis 25	Reed's Brick and Plastering.
Gas Pliers.	dis 50%	Clement & Maynard's.
PLUMBS AND LEVELS.		Worrell's Brick.
Diaston's.	dis 40%	Garden.
Stanley R. & L. Co.'s Pat. Adjustable, dis 65&10&10%		TRUCKS (WARRIORS, AC.)
Stanley R. & L. Co.'s Non-Adjustable, dis 65&10&10%		Handy Truck.
Chapin's Patent Adjustable.	dis 65&10&10%	Penfield Block Co.'s list, 1881.
Chapin's Non-adjustable.	dis 65&10&10%	Peerless, with Cogs, No. 3.
Standard Rule Co.'s New Adjustable.	dis 65&10&10%	Peerless, with Cogs, No. 4.
Standard Rule Co.'s Non-Adjustable.	dis 65&10&10%	Eureka, No. 2.
Pocket Levels.	dis 65&10&10%	VISERS.
RAIL.		Cheney's Combined Vise and Anvil.
Sliding Door, Wrought Brass.	dis 43c, dis 30%	Solid Box—Wilson's.
Sliding Door, Bronzed Wrt. Iron.	dis 50c, dis 35%	" Trenton.
" Iron, Painted.	dis 40c, dis 20&10%	" Iron City Tool Works.
Barn Door—Inch.	dis 50c, dis 35c.	Bench—Wilson's.
Per foot.	dis 50c, dis 30c.	" Trenton.
B. D. for N. E. Hangers—	dis 50c, dis 30c.	" Parker's.
" Small. Med. Large.		" Prentiss.
" Per 100 feet.	dis 20c, 2.70, 30 net.	" Bonney's.
RIVETS.		Well Wheels.
Iron and Tinned, new list, Dec. 10, 1881.	dis 50%	Stephen's Patent Vises.
In bulk, new list, Dec. 10, 1881.	dis 45%	WIRE.
Copper Rivets and Burrs.	dis 60&10%	Brass and Copper, list of Jan. 17, 1884.
Nos. 7 8 9 10 11 12 13 14 15.	dis 60c, dis 70c.	Bright and Annealed.
" 16c, 40c, 50c, 52c, 54c, 56c, 58c, 60c, 62c, 70c.		" Nos. 10 to 26, dis 60&10%
RIVET SETS.	dis 40%	Bright and Annealed.
RODS.		" Nos. 27 to 36, dis 70%
Stair, Brass.	dis 25%	Coppered.
" Stair, Black Walnut.	60c, dis 25—net.	" Nos. 37 to 48, dis 50%
RULES.		Galvanized, Nos. 0 to 18.
" Boxwood. Ivory.		Market list dis 40%
Chapin's.	{ dis 80% } dis 50&10%	Tinned, Nos. 0 to 18.
Standard.	{ dis 80% } dis 50&10%	" dis 60%
Stanley.	{ dis 70&10% } Ivory.	Annealed Fence, Nos. 8&10.
Stevens & Co.	dis 70&10% Ivory.	" dis 55%
" Stevens & Co. Miscellaneous.	dis 50&10%	Annealed Grape, Nos. 10 to 14.
SAD IRONS.		" dis 50 to 10%
" Self-Heating, Charcoal.	dis 90c net.	Fence Staples, Galvanized.
Mrs. Pott's Irons.	dis 35%	" dis 50c.
Enterprise Star Irons, new list, July 20, '82.	dis 35%	Japanned Barb Fence.
Comb'd Fluter and Sad Iron.	dis 15c.	" dis 40c.
Common Sad Iron.	dis 50c, dis 50c.	Galvanized Barb Fence.
SAND PAPER.		" dis 50c.
American (Cast) Iron.	dis 70&10%	Buck Thorn Galvanized.
" Pruning Hooks and Shears.		" dis 50c.
Baeder & Adamson's Flint, 00@12c.	dis 40c, dis 50c.	Picture Wire.
Baeder & Adamson's Flint, 2 1/2% & 3.	dis 50c, dis 50c.	" dis 60%
Baeder & Adamson's Flint, Assort'd 4 7/5.	dis 50c, dis 50c.	Clothes Line Wire, Galvanized.
Baeder & Adamson's Star.	dis 3.75, dis 50c.	" dis 75c.
Jersey Shears.	dis 80c.	Wire Cloth, green, drab and black.
J. Wiss & Son, Nickle.	50c & 50c.	" dis 50c.
Baeder & Adamson's Flint, Flint and Emery Paper.	dis 50c & 50c.	" dis 50c.

American Adjustable.	WRINKLES.	dis 45%
Baxter's Adjustable "S," list Jan. 1, 1880.		dis 20&10%
Coe's Genuine.		dis 60%
Coe's "Mechanics".		dis 60&10%
Coe's Pattern, Malleable.		dis 60&10%
Coe's Pattern, Wrought.		dis 60&10%
Girard Standard.		dis 60&10%
Girard Agl.		dis 60&10%
Always Ready.		dis 50c.
WRINGERS.	Per doz.	
Universal, XX, No. 2.		30c.
Universal, XX, No. 1.		32c.
Universal, XX, No. 8.		63c.
Universal, XX, No. 12.		each 50c.
Universal, XX, No. 18.		each 52c.
Universal, XX, No. 22.		each 50c.
Universal, XX, No. 24.		each 50c.
Universal, XX, No. 26.		each 50c.
Universal, XX, No. 28.		each 50c.
Universal, XX, No. 30.		each 50c.
Universal, XX, No. 32.		each 50c.
Universal, XX, No. 34.		each 50c.
Universal, XX, No. 36.		each 50c.
Universal, XX, No. 38.		each 50c.
Universal, XX, No. 40.		each 50c.
Universal, XX, No. 42.		each 50c.
Universal, XX, No. 44.		each 50c.
Universal, XX, No. 46.		each 50c.
Universal, XX, No. 48.		each 50c.
Universal, XX, No. 50.		each 50c.
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Universal, XX, No. 54.		each 50c.
Universal, XX, No. 56.		each 50c.
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Universal, XX, No. 60.		each 50c.
Universal, XX, No. 62.		each 50c.
Universal, XX, No. 64.		each 50c.
Universal, XX, No. 66.		each 50c.
Universal, XX, No. 68.		each 50c.
Universal, XX, No. 70.		each 50c.
Universal, XX, No. 72.		each 50c.
Universal, XX, No. 74.		each 50c.
Universal, XX, No. 76.		each 50c.
Universal, XX, No. 78.		each 50c.
Universal, XX, No. 80.		each 50c.
Universal, XX, No. 82.		each 50c.
Universal, XX, No. 84.		each 50c.
Universal, XX, No. 86.		each 50c.
Universal, XX, No. 88.		each 50c.
Universal, XX, No. 90.		each 50c.
Universal, XX, No. 92.		each 50c.
Universal, XX, No. 94.		each 50c.
Universal, XX, No. 96.		each 50c.
Universal, XX, No. 98.		each 50c.
Universal, XX, No. 100.		each 50c.
Universal, XX, No. 102.		each 50c.
Universal, XX, No. 104.		each 50c.
Universal, XX, No. 106.		each 50c.
Universal, XX, No. 108.		each 50c.
Universal, XX, No. 110.		each 50c.
Universal, XX, No. 112.		each 50c.
Universal, XX, No. 114.		each 50c.
Universal, XX, No. 116.		each 50c.
Universal, XX, No. 118.		each 50c.
Universal, XX, No. 120.		each 50c.
Universal, XX, No. 122.		each 50c.
Universal, XX, No. 124.		each 50c.
Universal, XX, No. 126.		each 50c.
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Universal, XX, No. 134.		each 50c.
Universal, XX, No. 136.		each 50c.
Universal, XX, No. 138.		each 50c.
Universal, XX, No. 140.		each 50c.
Universal, XX, No. 142.		each 50c.
Universal, XX, No. 144.		each 50c.
Universal, XX, No. 146.		each 50c.
Universal, XX, No. 148.		each 50c.
Universal, XX, No. 150.		each 50c.
Universal, XX, No. 152.		each 50c.
Universal, XX, No. 154.		each 50c.
Universal, XX, No. 156.		each 50c.
Universal, XX, No. 158.		each 50c.
Universal, XX, No. 160.		each 50c.
Universal, XX, No. 162.		each 50c.
Universal, XX, No. 164.		each 50c.
Universal, XX, No. 166.		each 50c.
Universal, XX, No		

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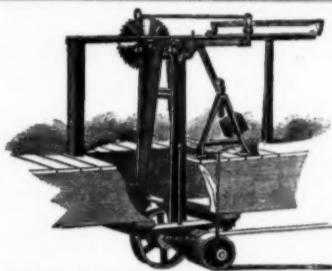
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New Swing Cross Cut Saw,

with rigid iron frame and steel arbor. The frame is mounted on a heavy iron base, bolted to the joist under the floor. Saw Mill Mandrels, Saw Machinery, and all sizes of Saw Arbors.

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185 Pearl Street, Cincinnati, Ohio.

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Under its present successful management for the past seven years.

And during that time its business has more than trebled, while its facilities have proportionately increased.

No expense is considered too great in obtaining and applying to the conduct of the business all possible improvements. With its present system for obtaining and promulgating information, this Agency is justly regarded by its patrons as authority on all matters affecting commercial credit. Its ramifications are greater and its business larger than any similar organization in the world conducted in one interest and under one management.

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THE DETROIT SIGHT FEED LUBRICATORS



Have revolutionized the system of oiling valves and cylinders of steam engines. The oil is delivered through the SIGHT FEED GLASS drop by drop into the steam pipe, lubricating perfectly *all the parts from throttle valve down*, effecting a sufficient saving in oil and wear of machinery to pay for the Lubricator several times a year. It costs nothing to try them, as one will be sent on thirty days trial to responsible parties, thus enabling a thorough test to be made before paying for the Lubricator. We refer to 20,000 users, including nearly all the leading railroads.

CAUTION.

As these Lubricators are covered by patents owned solely by this Company, parties should order only the "DETROIT SIGHT FEED CUPS," thus securing the best article and avoiding all legal complications. Liberal discount to the trade.

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Highest Scores

AT CLAY-PIGEONS EVER PUT ON RECORD.



J. R. Stice, Jacksonville, Ill. 99
W. S. Bell, Pittsburgh, Pa. 98
R. E. Sheldon, Cleveland, Ohio. 98
Andy Meaders, Nashville, Tenn. 96
T. A. Prechtel, Cleveland, Ohio. 96
C. F. Wheat, Cleveland, Ohio. 96
F. M. Eames, Bay Ridge, L. I. 95
McDuff, Cincinnati, O. 94
W. R. Huntington, Cleveland, Ohio. 94
H. H. Fleischer, Rochester, N. Y. 94
Benj. Teip'e, Covington, Ky. 93
Wm. Wagner, Washington, D. C. 93
Jno. A. Bell, Putnam, Pa. 93
Out of a possible 100 50 single and 50 double rises were made with

Chamberlin Cartridges.

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Cor. Holliday and Pleasant Sts., Baltimore.

Manufacturers of all kinds of Steam and Bath Boilers Smoke Stacks, Water Tanks, Lard Kettles, &c.

Particular attention given to repairs.

1837. NOVELTY WORKS. 1838.

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Engines and Boilers, Mills of all kinds, Marine Railways, &c. Improved Clay Tempering Machinery, Steam or Horse Power. Phosphate Machinery, Crushers, Rollers, Mixers, &c., &c.

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Repairing of all kinds promptly done.

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With STEEL FACED or SOLID STEEL SLIDING JAW, and ADJUSTABLE ATTACHMENTS. Superior in Make, Grip, Strength and Durability, and more economical in Time and Labor than any other Vise. Jewelers, Machinists in general, and Car and Locomotive Builders in particular, will find them especially adapted to their needs. Also STEPHEN'S PATENT PLANER CHUCKS. Sold by hardware, machinery and tool dealers. Send for descriptive circular and price-list.

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Over One-half of the Leading Jobbers are now heavy buyers of the COVERT "NEW" PATENT SNAP, finding in their superior quality and moderate price a most satisfactory inducement. We have guaranteed, and still continue to guarantee them to give perfect satisfaction, which guarantee has been fully substantiated by many flattering testimonies we have received attesting their superior merits.

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—FOR—

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In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.

Parties advertising in this column must have replies sent to their own address, and not to care of Manufacturers' Record, unless stamps are sent for forwarding replies. Advertisements sent not in accordance with this requirement will not be inserted.

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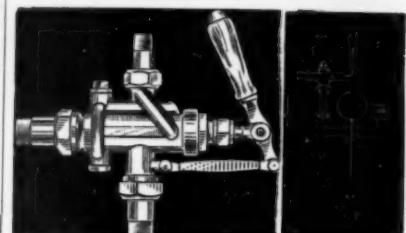
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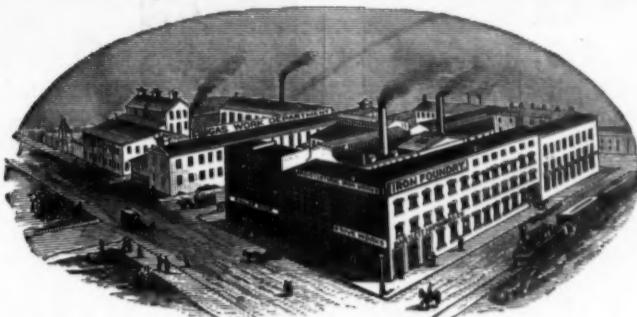
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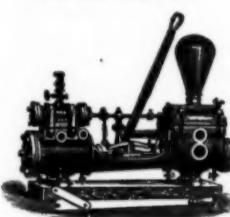
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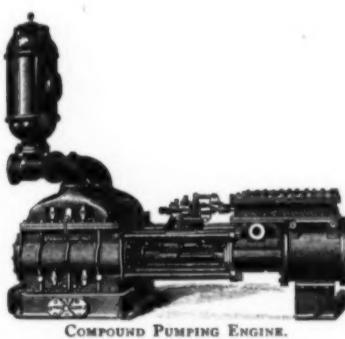
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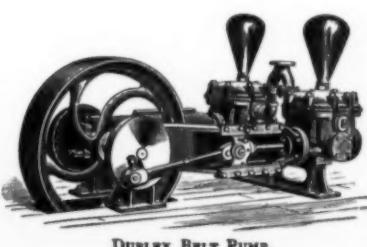
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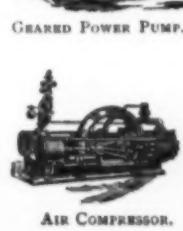
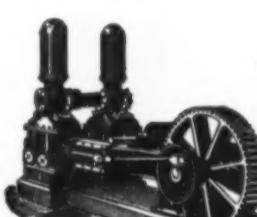
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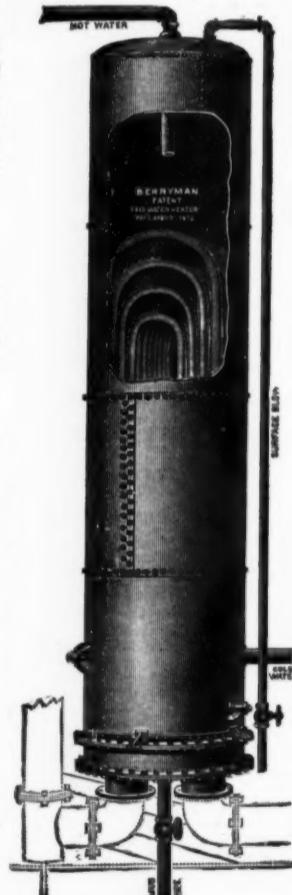
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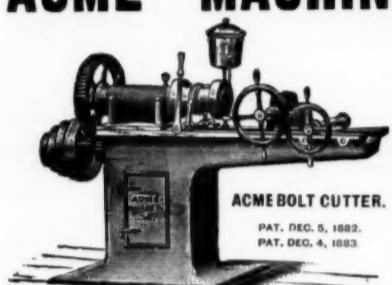
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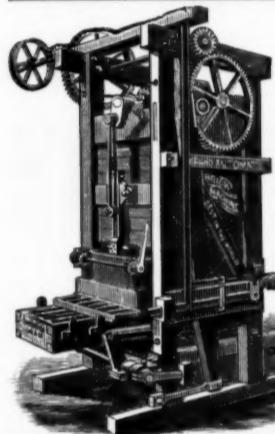
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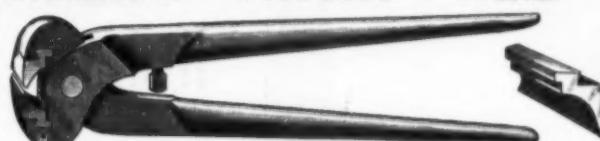
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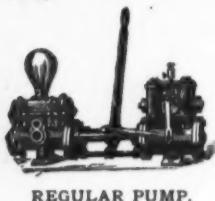
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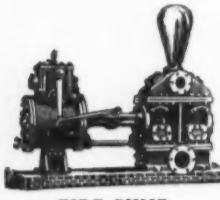
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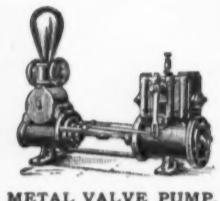
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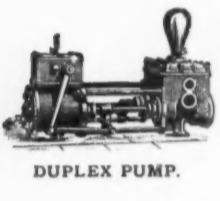
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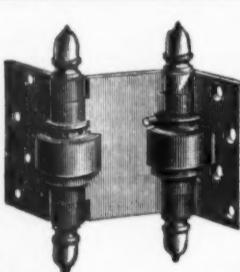
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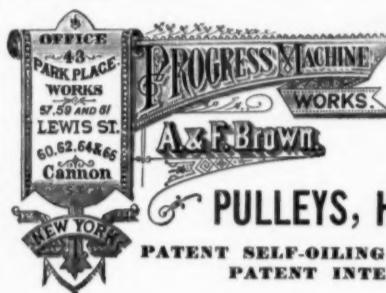
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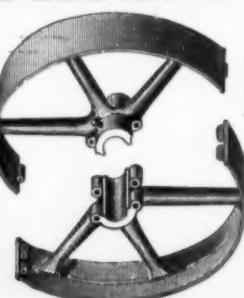
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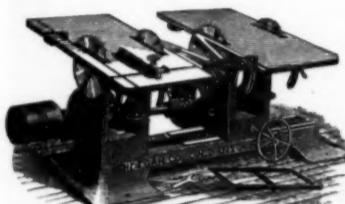
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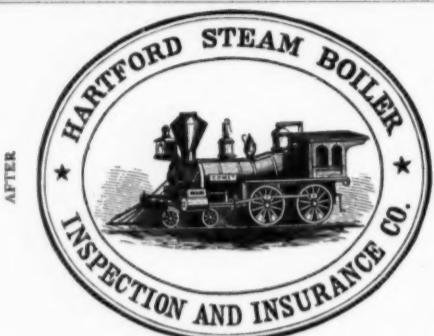
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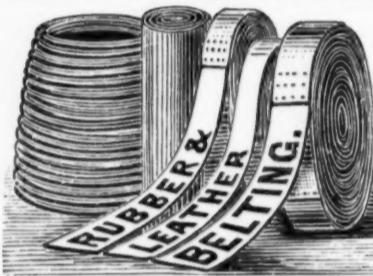
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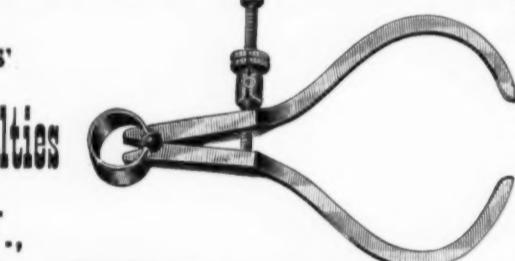
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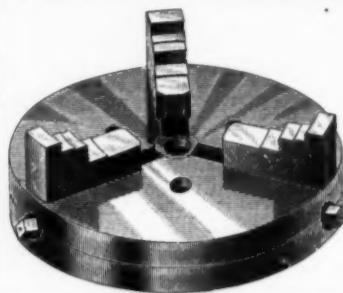
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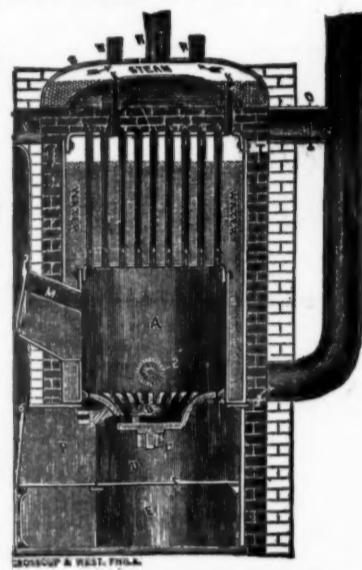
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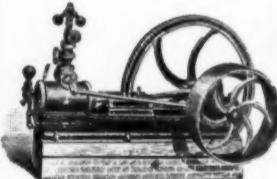
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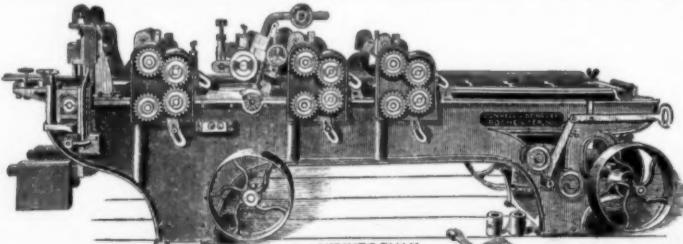
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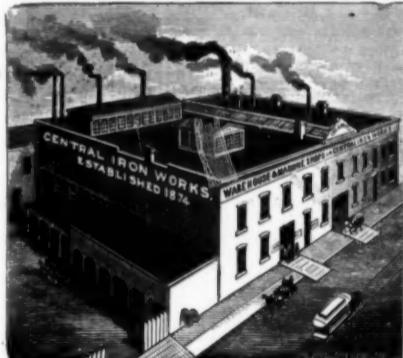
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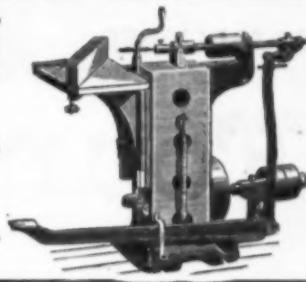
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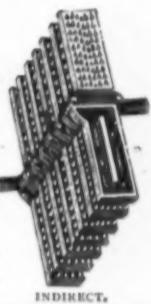
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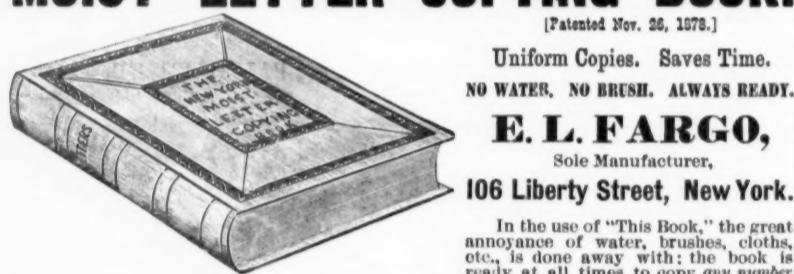
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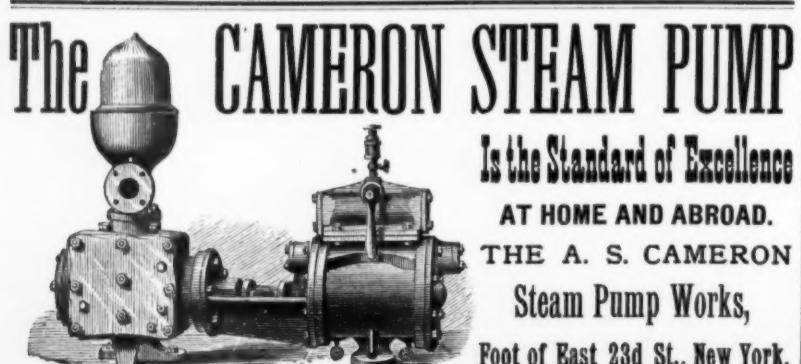
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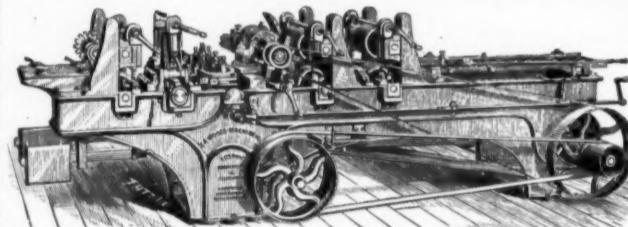
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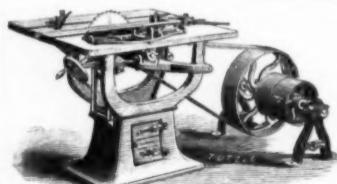
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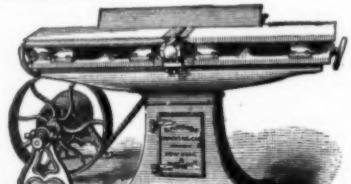


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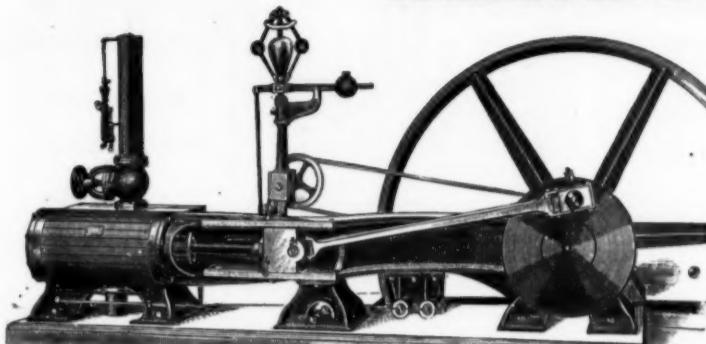


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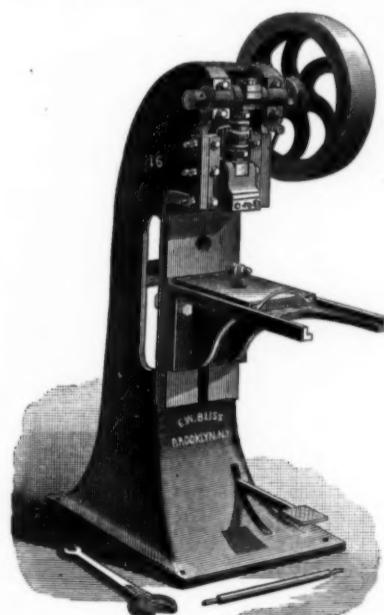
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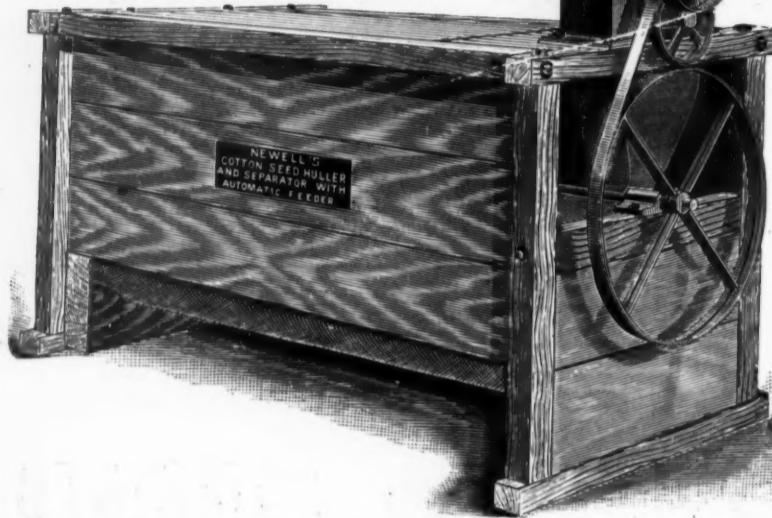
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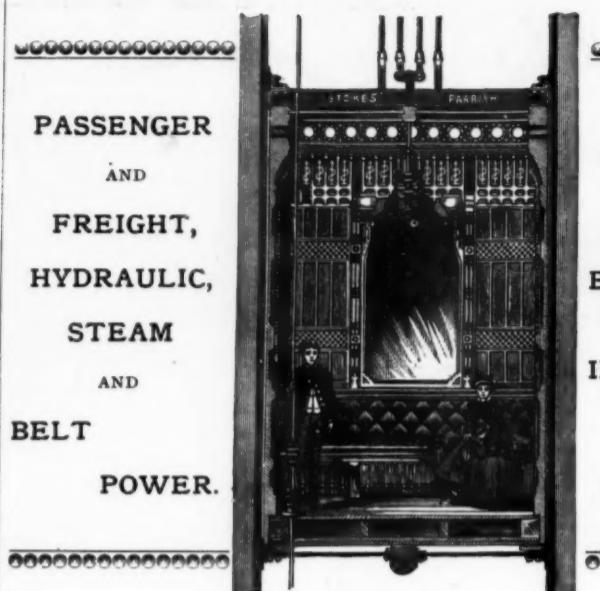
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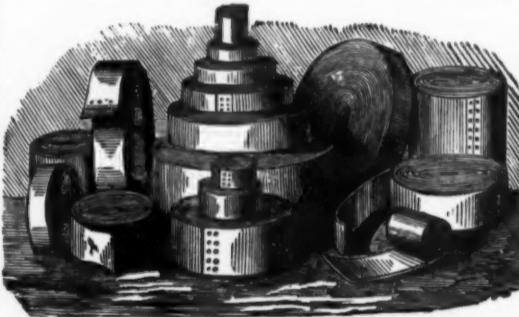
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